

A Companion Volume to
"The Art of Classical Guitar Playing"

Classical Guitar 2000

Technique for the Contemporary Serious Player



BY CHARLES DUNCAN

324.1/DUNC

SUMMY-BIRCHARD INC.

C O N T E N T S

Preface	1
Introduction: First Principles	2
<i>Section I: Scales</i>	4
Comprehensive Diatonic Scales	6
Two-Octave Scale Forms	8
Rhythmic Formulas for Practice	10
Two-Octave Diatonic Scales in all Keys	11
Three-Octave Diatonic Scales	24
Developing Velocity in Scales	28
Scales Beyond the Diatonic	30
<i>Section II: Chords and Arpeggios</i>	34
Systematic Cadences	34
Recurring Chord Forms	35
Cadences in the Principal Keys	37
Arpeggios	42
Basic Arpeggios of Increasing Complexity	44
Arpeggios with Thumb and Fingers Played Together	48
Practicing Arpeggios with the Carcassi Etude 2	52
Two Etudes by Dionisio Aguado	54
<i>Section III: Left-Hand Development</i>	56
Slurs	56
Basic Ascending Slur Exercises	58
Descending Slurs	60
Ascending and Descending Slurs Combined	62
Triplet Slurs	63
Slurs Across the Fingerboard	64
Chromatic Octaves and Tenths	66
Bar-Chord Strength Development	68
<i>Section IV: Exercises in Technical and Interpretive Control</i>	70
The Left Hand	71
The Right Hand	76
Interpretive Control	84

Design: Aean Pinheiro
 Copyright © 1993
 Summy-Birchard Music
 division of Summy-Birchard Inc.

0-87487-681-8
 1 3 5 7 9 8 6 4 2

Summy-Birchard Inc.
 exclusively distributed by
 Warner Bros. Publications Inc.
 265 Secaucus Road
 Secaucus, New Jersey 07096-2037

Any duplication, adaptation or arrangement of the compositions
 contained in this collection requires the written consent of the Publisher.
 No part of this book may be photocopied or reproduced in any way without permission.
 Unauthorized uses are an infringement of the U.S. Copyright Act and are punishable by Law.

Printed in Canada



M. FURTADO & CO
BOMBAY - 400 002

PREFACE

The purpose of this book is to provide, within the covers of a single volume, serious students of the classical guitar enough exercise material to progress to the highest levels of competence. Past a point, the value of exercises diminishes because the technical challenge of the pieces themselves becomes the means to the end. However, it takes several years of structured study to attain that plateau of skill. Also the developing player must come to appreciate the value of *process* in learning and performing music. The *end* may be the beautiful performance of a piece, but it can come about only through a detailed mastery of the *means*, in which the technical and artistic elements of the music are explored in the most minute detail. Conscientious practice of the exercise material contained in this book will provide the necessary tools.

The term "serious student" encompasses a variety of possible backgrounds and levels of development. This is not a book for the casual guitarist or for the beginner, but it may be used profitably by a wide range of students. It combines a number of major groups of exercises, many of which are new here, into a comprehensive approach. The student who works through these pages patiently and diligently will be rewarded by a better understanding of the classical guitar as well as a stronger, quicker, more sensitive, more *intelligent* pair of hands with which to pursue his or her musical goals.

Charles Duncan
Atlanta, 1993



INTRODUCTION: FIRST PRINCIPLES

The various kinds of exercise material in the following pages will help develop your technical capabilities to their highest potential. However, results are proportional to effort, especially the thoughtful attention to detail. Do not equate fatigue with accomplishment! Many hours may be spent in doggedly hammering away at exercises to no avail, because the work was done crudely or mechanically. But with focused, mentally alert effort, many benefits can be achieved in a relatively short time.

Certain underlying concepts of position, movement, and touch are essential to correct practice. These are developed in detail in my companion book *The Art of Classical Guitar Playing*. In summary the most important are:

- **Seating:** Legs serve as springs rather than inert support, and inward pressure from the right knee helps stabilize the instrument. Right forearm perches lightly on the guitar; with left arm in playing position, left and right elbows are symmetrically bent (the visual impression of the player's rapport with the instrument is strong — overall, a tight body package). Only the back of the *upper* bout touches the chest; fingerboard is inclined approximately 30° from horizontal, so that the tuning key of the *fourth* string is at eye level.
- **Right Hand position:** Wrist is slightly arched, but otherwise straight (i.e., very little sidewise curve). Knuckles are high, fingers compressed and aligned with forearm. The hand is thus formed into a compact playing unit that also transmits weight and force from the whole arm. Back of hand should be essentially parallel with the guitar (*not* inclined, or pronated to the left!). The thumb makes about a 45° angle with the bass strings, with the tip turned back, for both free-stroke and rest-stroke.
- **Right Hand touch:** Nails are seated against the string, with flesh contact from *above only*, for all strokes (single notes, chords, arpeggios, etc.). Mechanism of the basic stroke, whether rest-stroke or free-stroke, is a downward push with pressure at the contact point of the nail, resulting in a slice to the left. In theory, and in slow practice, the stroke contains a distinct preparation component: engage the nail; then release the string. To achieve good tone, nails must be filed properly in relation to their natural arch-type (see Chapter Four, *The Art of Classical Guitar Playing*, for a thorough discussion with illustrations of the various nail-types).

• **Left Hand position:** Fingers generally maintain strong curvature and lateral spacing with the tips hovering just above the strings, but context may require something different; when it does, need governs position. Finger pressure is enough to make clean contact, but not more — especially to be avoided is excess pressure from the thumb. Thumb is slightly pronated and grips from the inside rather than full face, thus locking bones and muscles into passive support. Wrist is generally quite straight (not arched!); this is the position of strength and efficiency — a columnar alignment of forearm, hand, and fingers. Palm is very close to the fingerboard; in many situations, part of the palm (especially inside of 1st knuckle) may actually touch the edge of the fingerboard for security and stability — a "V-grip," like that used by violinists.

• **Left Hand movement:** Finger action is regulated by small power surges so as to afford micro-relaxations between movements and create the sensation that the left hand is actually *playing* the notes, not merely holding them. Position-sense is established by the first finger, which generally serves as a pivot for the movement of the other fingers. In shifts, it serves whenever possible as a *guidefinger*, remaining firmly on the string and sliding to the new fingerboard position. Shifts of more than one or two frets are whole-arm movements initiated by the elbow and shoulder (see also p. 74). One-fret shifts usually require only a lateral movement of the hand pivoting from the wrist, while the thumb remains fixed. In all shifts, the eye actively *leads* the hand — clear, visual anticipation of the new position.

• **Mental Concentration:** The conscious mind and the active will should monitor all playing activities. Even when a movement has become reflex, a form of conscious control still functions in the best playing — or perhaps, is *free* to function creatively. Learning the mental control that permits real freedom in playing poses the most subtle and challenging task in mastering the classical guitar, and is the goal toward which these exercises are intended.

SECTION I: SCALES

Why practice scales?

Diatonic scales (that is, conventional major and minor scales) are the foundation of music as we know it. All serious musicians practice these scales as a basic and persistent aspect of their craft.

For the guitar, the study of scales serves several purposes. Foremost among these is conceptualizing the lateral-longitudinal grid of the fingerboard. We learn to associate spacings of the fingers with musical intervals, and these in turn with musical notations. Because of the complex nature of the fingerboard, with the same note appearing often in as many as four different places, this is a never-ending challenge that systematic scale practice of the right sort helps surmount.

But there are other benefits too. The simple linear patterns of scales allow the left hand to be maintained in a stable, economical position. The player can attend to movement, emphasizing the curved, compact shape of the fingers — tips pointed straight down at the fingerboard, good lateral separation. Under this kind of discipline, the repetitive movements of scales increase the strength and dexterity of the hand.

The right hand benefits as well. Scale study affords the most basic opportunity to cultivate tone-quality. The mechanism is the prepared attack: flailing at the string will not do! Instead, seat the nail against the string (flesh contact from *above only*) and *push* down and through, each time, heavy fingertips, as if lead weights were attached. The ear soon comes to discriminate the beautiful sound produced and to regulate the touch accordingly.

A corollary is the improved *synchronization* of the right and left hands. The guitar requires *two* different, simultaneous forms of small-motor coordination to produce a single note. Synchronized impulses are therefore essential, and intelligent practice of scales establishes a base-line of synchronization. The *prepare* impulse of the right hand overlaps the *attack* impulse of the left hand. With the note thus fixed by a finger of both hands, only then does the right hand execute. The whole process takes perhaps a fraction of a second, and in developed players is undetectable, but it is the cornerstone of refined technique. Practiced for control, it results in a staccato articulation; with the control relaxed, it produces the legato connection of notes, in which one tone seems to flow into the next.

How should scales be practiced?

There is no "magic" in any exercise. Gains are proportional to the care and sense of purpose with which the exercise is performed. The specific purposes of scale practice suggest what to do.

- To improve sight-reading and fingerboard perception: play slowly and softly, looking at the notes. Say the names of the notes as you play. Don't play any faster than accuracy permits; there are no rewards for speed! Use this technique to memorize the various two- and three-octave scales. Even after memorization, return to some of the remote keys (such as Db) for a sight-reading refresher.
- To improve left-hand strength and coordination: practice, again, very slowly and softly; don't worry about the right hand. *Look* intently at the left hand; keep the fingertips within an inch of the fingerboard at all times, joints curved so that fingers are neat structural arches. Do *not* "kill" the fingerboard with heavy finger pressure — to do so merely wastes energy. Do maintain wide separation and *aim* the fingertip at a point right behind the metal fret (not in the middle of the fret-space).
- To improve right-hand touch and tone: use scales that are perfectly memorized so that you can watch your right hand. Look for nail-to-string contact, the downward push of the finger, a short, powerful movement, and symmetrical alternation of the fingers. Use a-m and a-i as well as m-i alternation; this will help to develop the ring finger and balance the overall touch. *Listen* for tone quality; try a leftward "slice" of the finger for improved tone. Experiment with small changes of hand position by lateral pivoting from the wrist; notice the effect upon tone-quality. Use a fractional amount of this sidewise wrist movement in playing a scale to balance tone between bass and treble and to minimize bass-string nail noise.
- To improve synchronization of the hands: watching the left hand, feel the right-hand fingernail seat against the string at the moment the left hand fingertip falls. Then execute the note, and repeat the same procedure for the next note. As the process becomes more reflex-regulated, simply listen for the staccato cutoff of each note; done correctly, the effect is choppy-sounding. But this is not music — it is a form of self-teaching. When the hands have absorbed the lesson, then more musical applications follow.

Pattern B (Three strings)

Major

Minor

Pattern C (Two strings)

Notice the shift to a higher position; the first finger must remain firmly in contact with the string during the shift as an active guide-finger.

Major

Minor

TWO-OCTAVE SCALE FORMS

Two-octave scales are formed by coupling complementary one-octave scale patterns. The combinations are these:

- (1) Six-string scales within a single position of the fingerboard: A+B, B+A.
- (2) Five-string scales requiring one position-shift: A+C, B+B, C+A.

The five-string forms can begin on either the 6th or 5th string, thus giving several possible scale forms. However, some of these are redundant. A network of overlapping two-octave scales is achieved for all keys by a total of *five* scale forms:

- Two scales beginning on the 6th string that lie within a single fingerboard position (Form I and Form II).
- Two scales beginning on the 5th string that require one position-shift, ascending and descending (Form IV and Form V).
- One scale (Form III) beginning on the 6th string and requiring a position-shift that links Forms II and IV in the sequence of scale forms up the fingerboard.

Scale forms are shown below as they appear in the *second* position. Observe carefully the differences between the ascending and descending forms of the melodic minor.

Form I: A + B

Major

Minor

Form II: B + A

Major

Minor

Notice the occasional variation in shift points within the scales below. Choice of shift point is governed by expediency: convenience to the fingers and coincidence of the shift with rhythmic accent (when playing the scale in 8th or 16th notes). Be sure that the first finger serves as an active guide-finger on all shifts, descending as well as ascending.

Form III: C + A

Major

Minor

Form IV: A + C

Major

Minor

Form V: B + B

Major

Minor

RHYTHMIC FORMULAS FOR PRACTICE

Once memorized, scales must be practiced with rhythmic precision. The basic way of playing them is in 8ths, triplets, and 16ths, shown below for the Form V, C Major scale. Use a metronome to provide a regular, objective pulse. Do not sacrifice accuracy for speed! Real velocity grows out of exact rhythmic control (see also pp. 28-29, for velocity-development techniques).

The image displays four staves of musical notation for a guitar exercise in 2/4 time. The notation includes various fingerings (1-4) and articulations (accents, slurs) for a sequence of eighth and sixteenth notes. The exercise is divided into four measures per staff, with repeat signs and a final double bar line at the end.

Staff 1: The first measure contains a sequence of eighth notes with fingerings 2, 4, 1, 2, 4, 1. The second measure contains a sequence of eighth notes with fingerings 3, 1, 3, 1, 2, 4. The third measure contains a sequence of eighth notes with fingerings 1, 3, 4, 3, 1, 4. The fourth measure contains a sequence of eighth notes with fingerings 1, 4, 2, 1.

Staff 2: The first measure contains a sequence of eighth notes with fingerings 3, 1, 3, 1, 4, 2. The second measure contains a sequence of eighth notes with fingerings 1, 4, 2, 1, 4, 2. The third measure contains a sequence of eighth notes with fingerings 2, 4, 1, 2, 4, 1. The fourth measure contains a sequence of eighth notes with fingerings 3, 1, 2, 4, 1, 3.

Staff 3: The first measure contains a sequence of eighth notes with fingerings 1, 3, 4, 3, 1, 4. The second measure contains a sequence of eighth notes with fingerings 2, 1, 3, 1, 3, 1. The third measure contains a sequence of eighth notes with fingerings 3, 4, 2, 1, 4, 2. The fourth measure contains a sequence of eighth notes with fingerings 2, 4, 1, 2, 4, 1.

Staff 4: The first measure contains a sequence of eighth notes with fingerings 3, 1, 2, 4, 1, 3. The second measure contains a sequence of eighth notes with fingerings 1, 4, 2, 1, 3, 1. The third measure contains a sequence of eighth notes with fingerings 4, 2, 1, 4, 1, 3. The fourth measure contains a sequence of eighth notes with fingerings 4, 2, 1, 4, 1, 3.

*In two-octave scales, an extra note is required for triplet execution. This can be the note either above or below the final key-note, depending upon the fingering available.

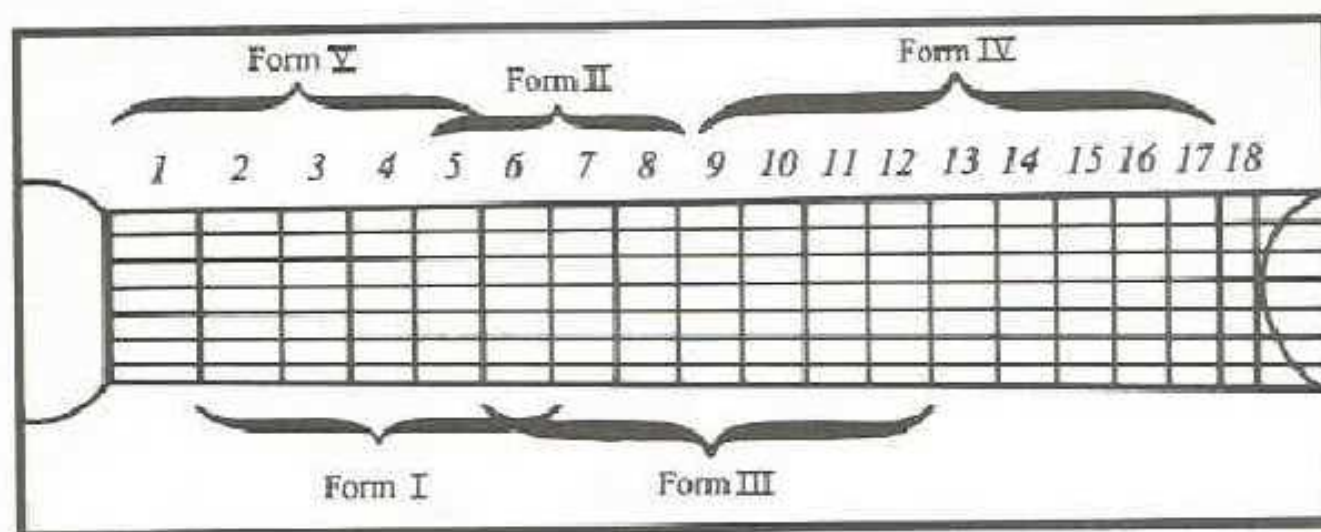
For variety and the development of further rhythmic control, use the following patterns.

[illegible]

TWO-OCTAVE DIATONIC SCALES IN ALL KEYS: THE FINGERBOARD SYSTEM

The five two-octave scale forms cover the fingerboard with overlapped scales in any key. Scale forms recur up the fingerboard in a cyclical sequence. Depending on the key, the order is always one of the following: I-II-III-IV-V; II-III-IV-V-I; IV-V-I-II-III; or V-I-II-III-IV. For many keys, only four consecutive scales are practical, due to the awkwardness of playing beyond the 12th fret. Open-position fingerings are the first form in keys where they can be used; they should be understood as modified versions of one of the moveable forms.

The nature of the fingerboard scale-sequence is illustrated below in two ways for the key of A minor: (1) a diagram of the fingerboard zones covered by the scale, and (2) a schematic musical grid of the note-clusters formed by the scale in its successive positions.



Fret: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Form V

Form I

Form II

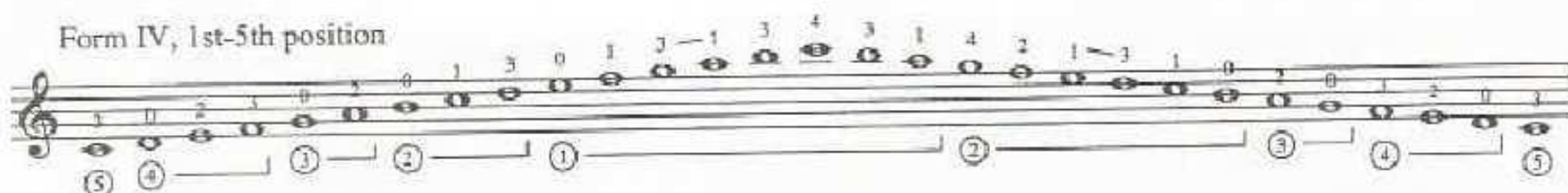
Form III

Form IV

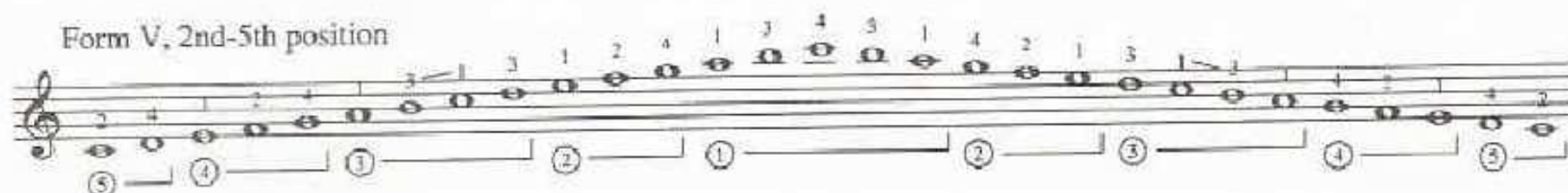
The schematic musical grid shows the note-clusters for the A minor scale in its five forms. Each form is represented by a staff with notes indicating the scale positions. The forms are arranged vertically, corresponding to the fretboard zones shown in the diagram above.

C Major

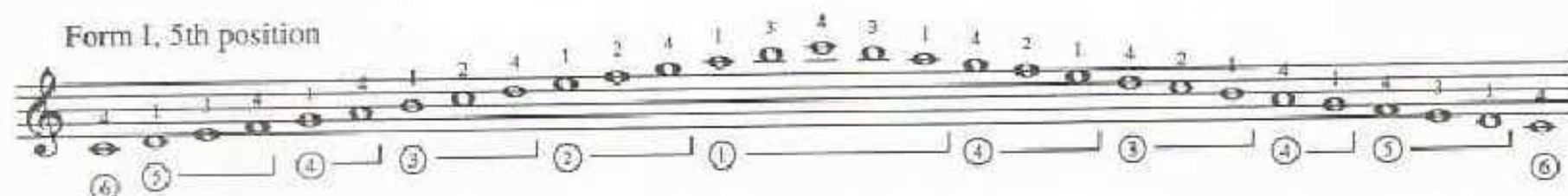
Form IV, 1st-5th position



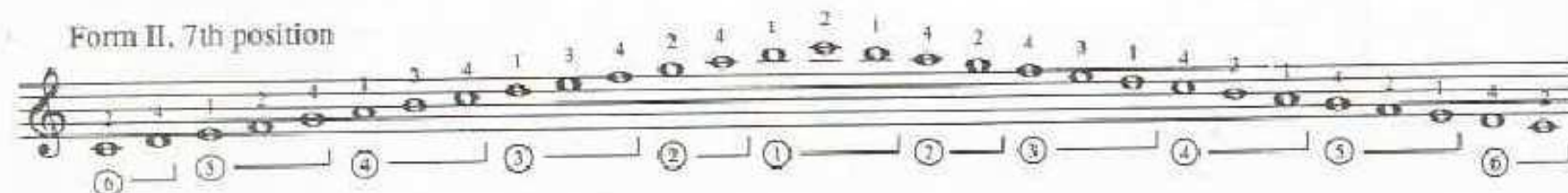
Form V, 2nd-5th position



Form I, 5th position



Form II, 7th position



A minor

Form V, 1st-2nd position



Form I, 2nd position



Form II, 5th position



Form III, 5th-9th position

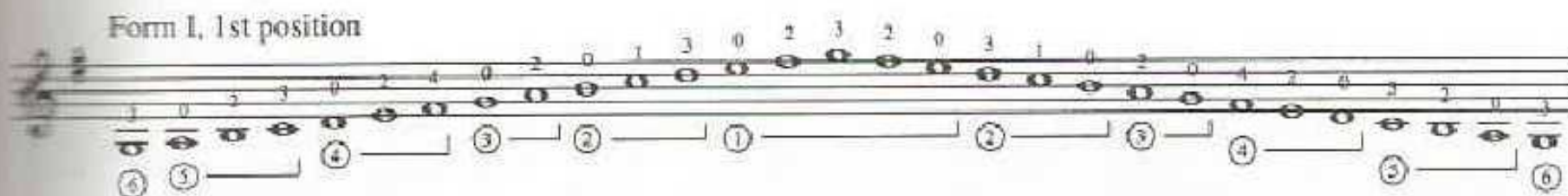


Form IV, 9th-14th position

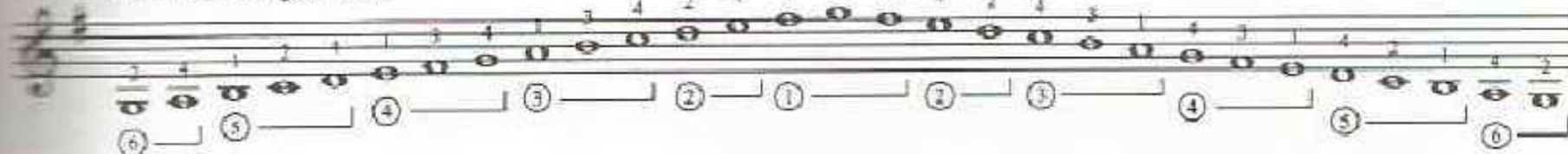


G Major

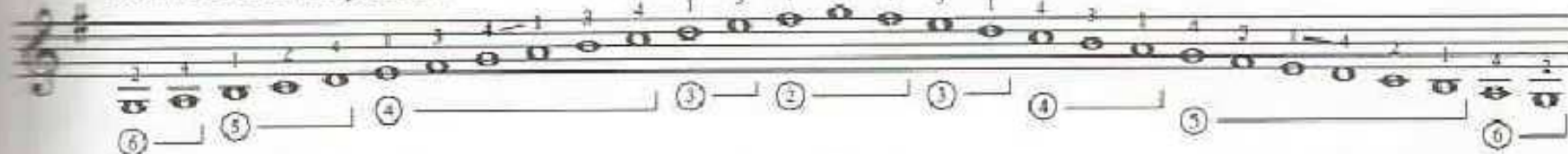
Form I, 1st position



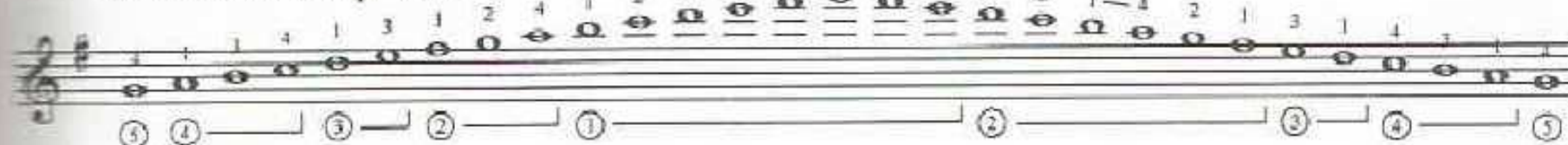
Form II, 2nd position



Form III, 2nd-7th position

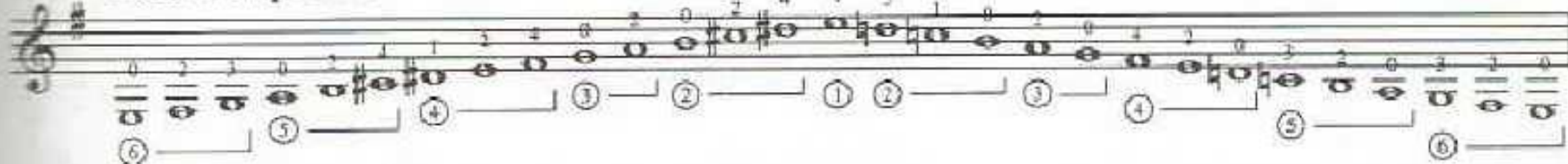


Form IV, 7th-12th position



E minor

Form II, 1st position



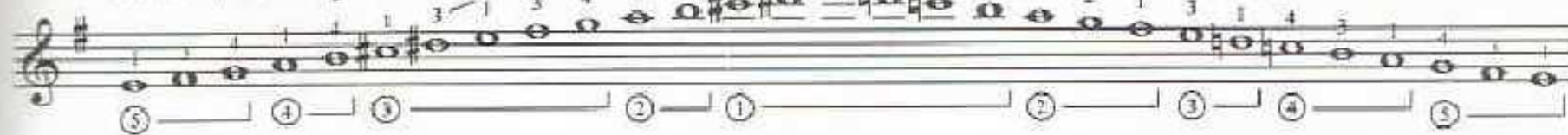
Form III, 1st-4th position



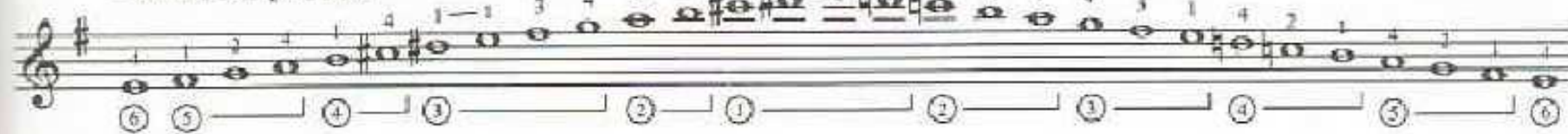
Form IV, 4th-9th position



Form V, 7th-9th position



Form I, 9th position

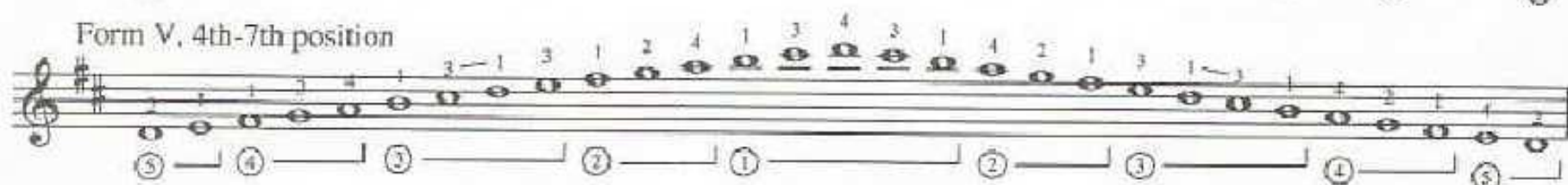


D Major

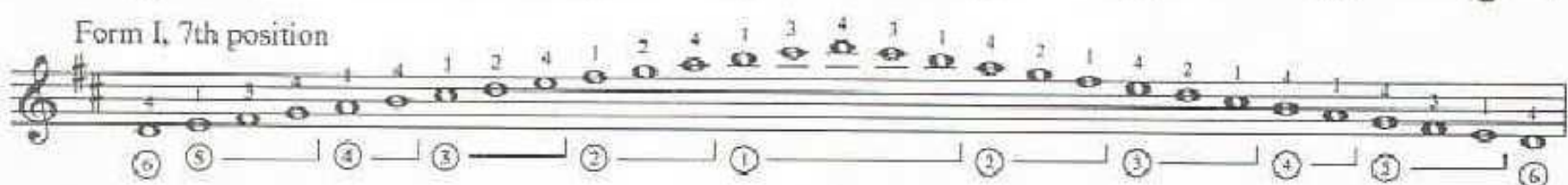
Form IV, 2nd-7th position



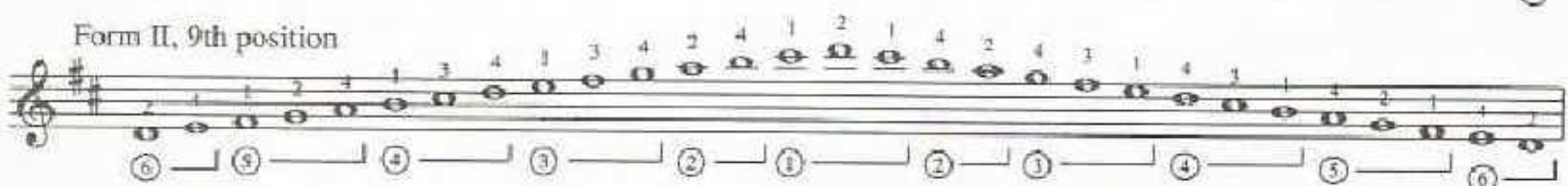
Form V, 4th-7th position



Form I, 7th position



Form II, 9th position



B minor

Form V, 2nd-4th position



Form I, 4th position



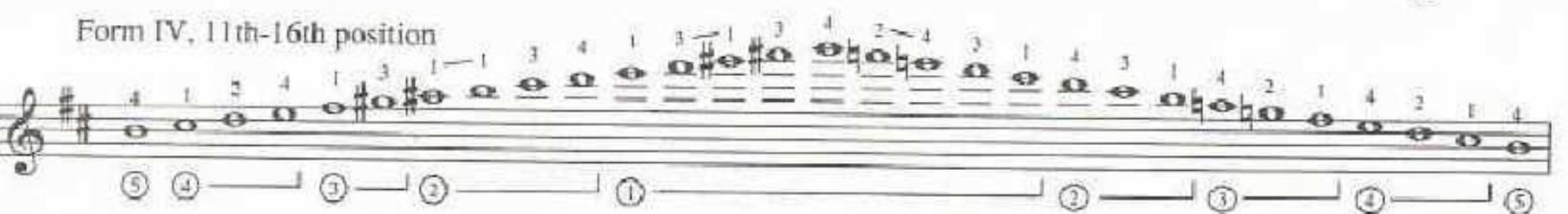
Form II, 7th position



Form III, 7th-11th position

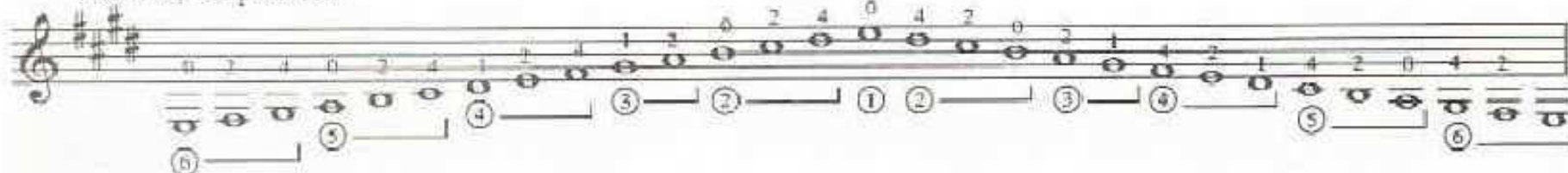


Form IV, 11th-16th position

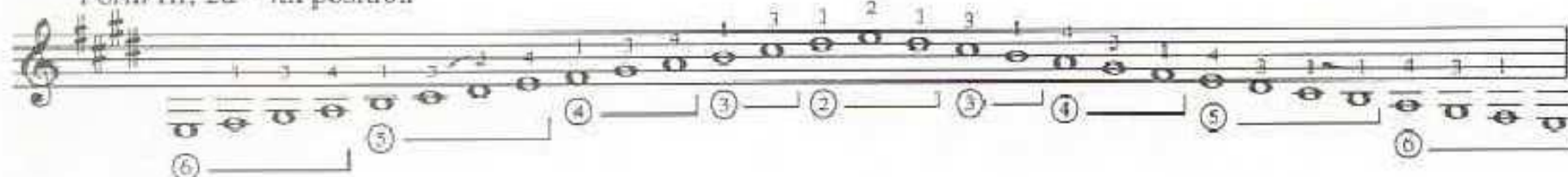


E Major

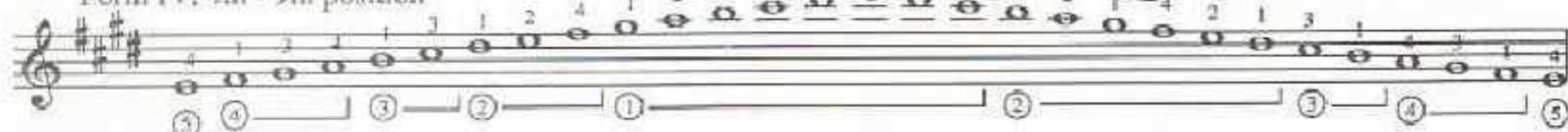
Form II, 1st position



Form III, 2d - 4th position



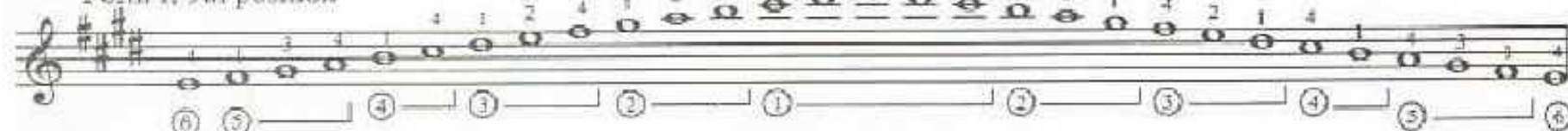
Form IV, 4th - 9th position



Form V, 6th - 9th position

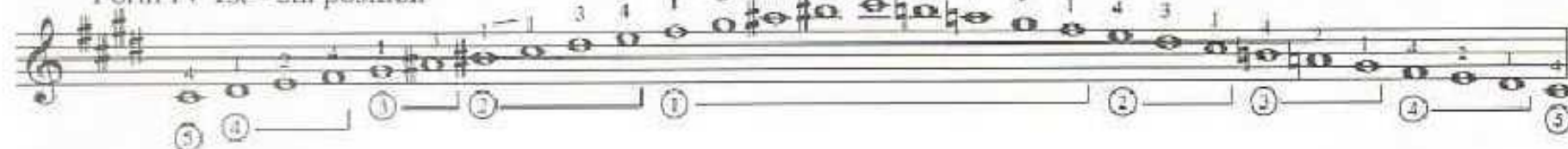


Form I, 9th position



C# minor

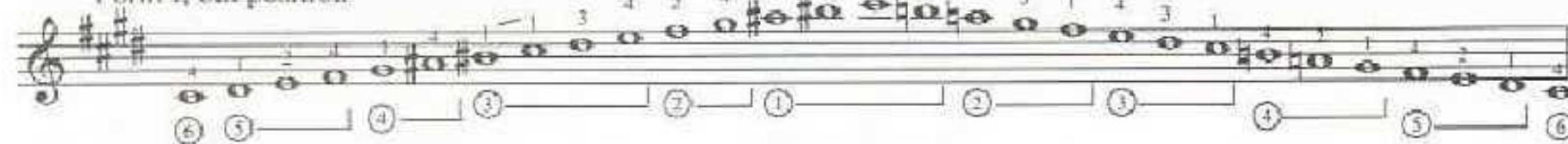
Form IV 1st - 6th position



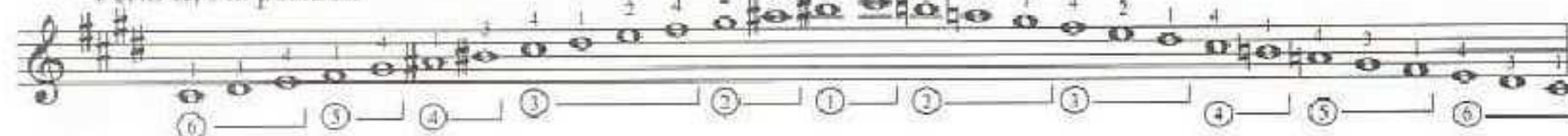
Form V, 4th - 6th position



Form I, 6th position



Form II, 9th position



B Major

Form V, 1st - 4th position

1st Violin, 1st - 4th position

Form I, 4th position

Form I, 4th position

The musical notation shows a sequence of notes on a single staff. Above each note is a number indicating the finger used (1, 2, 3, or 4). Below the staff, there are circled numbers 6, 7, and 8, each followed by a horizontal line segment.

Form II, 6th position

Form III, 6th - 11th position

Form IV, 11th position

Form IV, Fifth position

G♯ minor

Form I, 1st position

A musical staff in treble clef with a key signature of three sharps (F#, C#, G#). The melody consists of quarter notes and eighth notes. Below the staff are fingerings indicated by numbers 1-4 above the notes and circles containing numbers 1-6 below the staff, connected by horizontal lines.

Form II, 4th position

[illegible]

Form III, 4th - 8th position

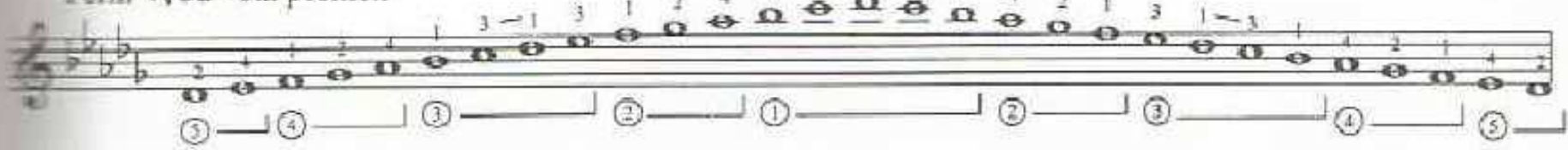
Form IV, 8th - 13th position

D Major

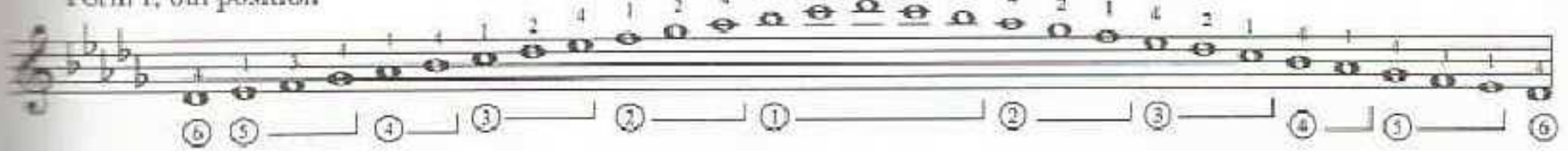
Form IV, 1st - 6th position



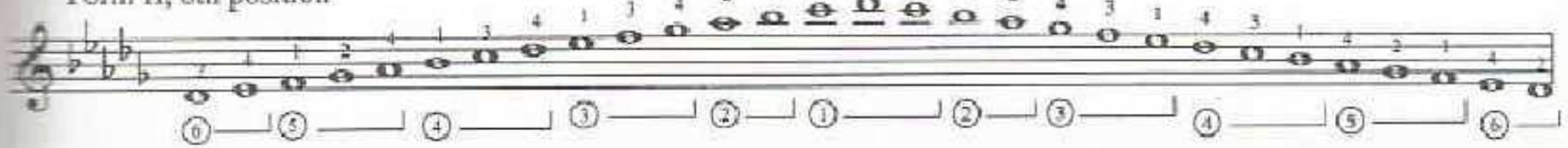
Form V, 3d - 6th position



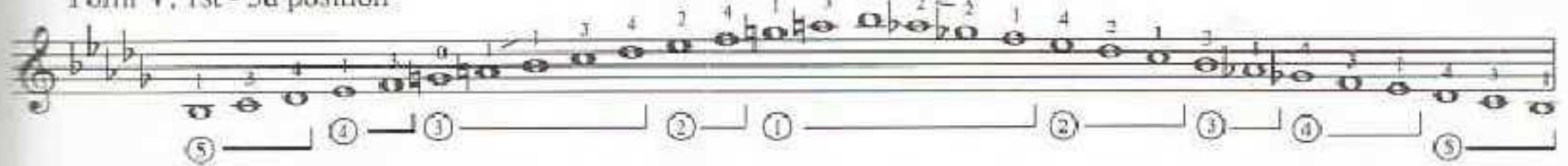
Form I, 6th position



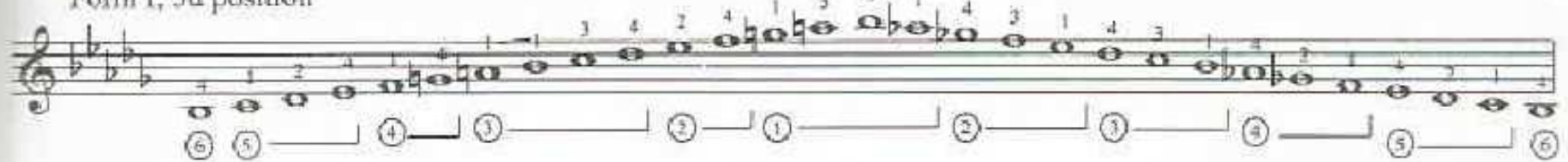
Form II, 8th position

**Bb minor**

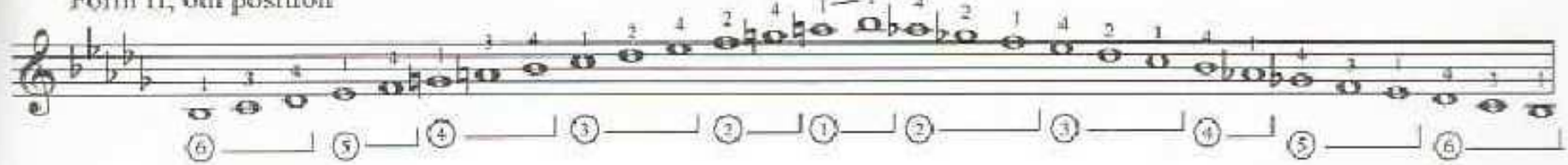
Form V, 1st - 3d position



Form I, 3d position



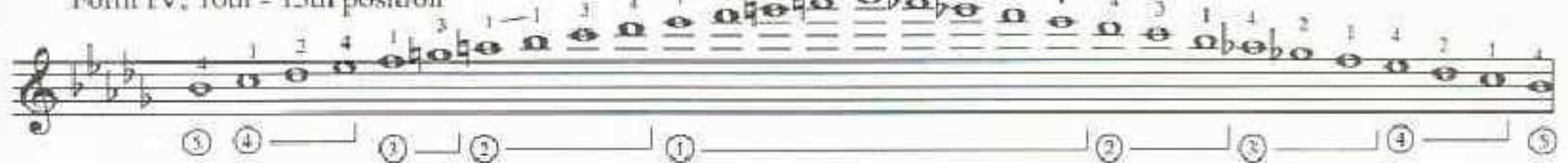
Form II, 6th position



Form III, 6th - 10th position



Form IV, 10th - 15th position



A♭ Major

Form I, 1st position

Form II, 3d position

Form II, 3d position

Form III, 3d - 8th position

2 4 1 2 4 1 3 4 1 3 1 2 1 3 1 4 1 4 3 1 4 2 1 4 2

(6) (5) (4) (3) (2) (3) (4) (5) (6)

Form IV, 8th - 13th position

[illegible]

F minor

Form II, 1st position

Form III, 1st - 5th position

Form IV, 5th - 10th position

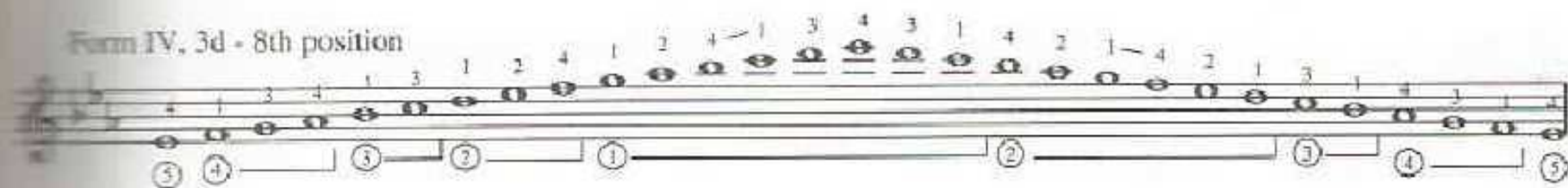
The first staff of music is in treble clef with a key signature of one flat (B-flat). It contains a melody line with eighth and sixteenth notes. Below the staff, there are fingerings: 5, 4, 3, 2, 1, 2, 3, 4, 5. There are also some additional markings above the staff, including a '1' and some numbers in a box.

Form V, 8th - 10th position

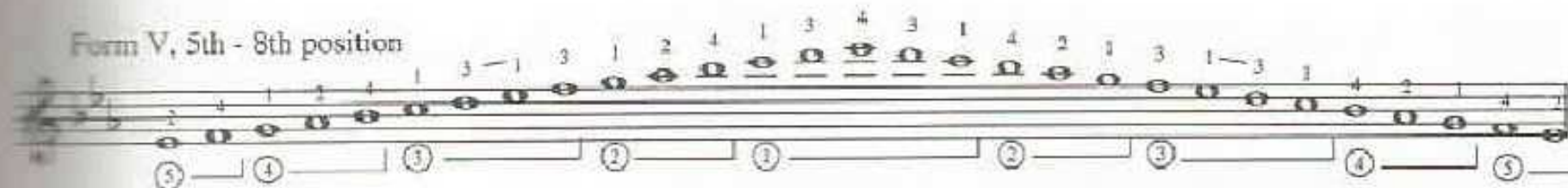
The first staff of music for 'The Rose Tree' is written in treble clef with a key signature of one flat (B-flat). The melody consists of eighth and quarter notes. Below the staff, a sequence of fingerings is provided: 5, 4, 3, 2, 1, 2, 3, 4, 5.

E $\flat$ Major

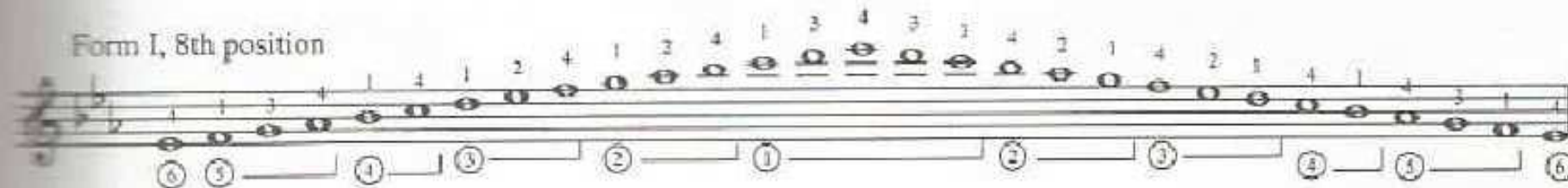
Form IV, 3d - 8th position



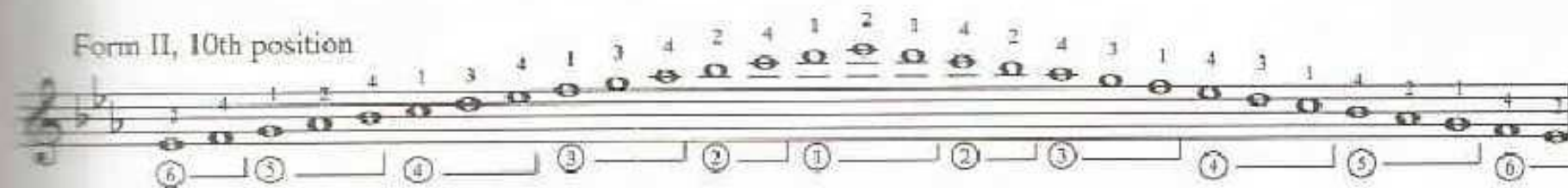
Form V, 5th - 8th position



Form I, 8th position



Form II, 10th position

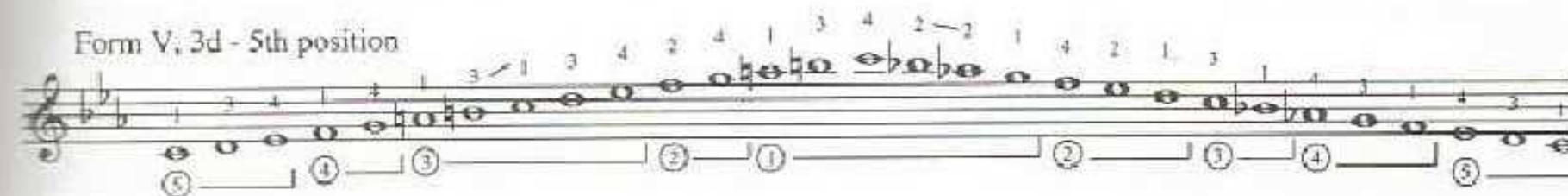


C minor

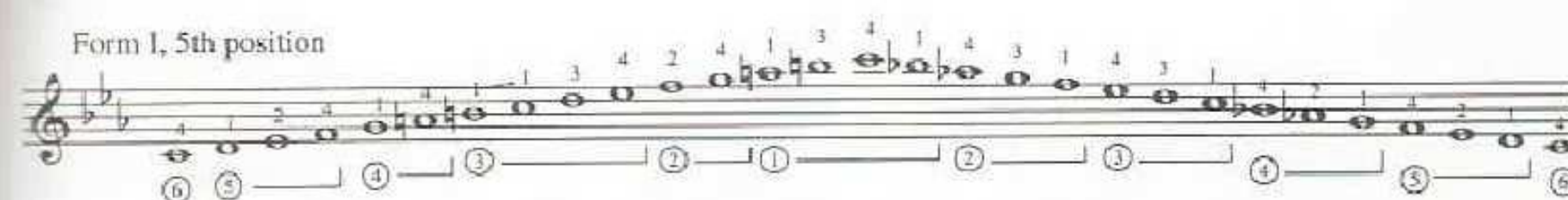
Form IV, 1st - 5th position



Form V, 3d - 5th position



Form I, 5th position

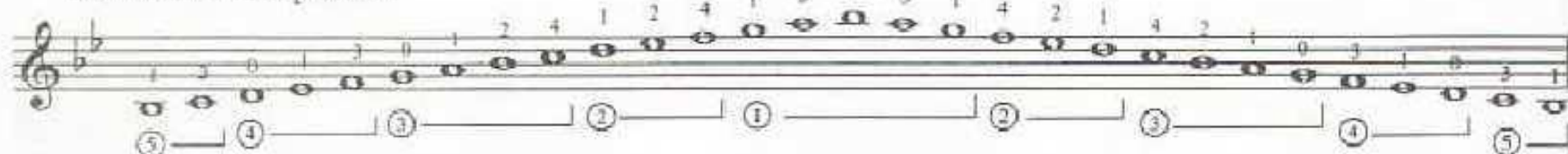


Form II, 8th position



B $\flat$ Major

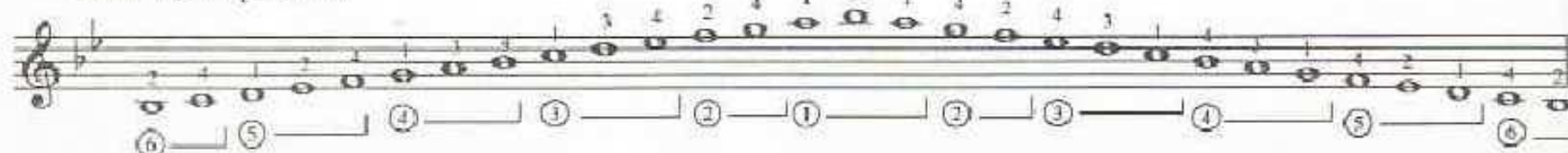
Form V, 1st - 3d position



Form I, 3d position



Form II, 5th position



Form III, 5th - 10th position



Form IV, 10th - 15th position



G minor

Form I, 1st position



Form II, 3d position



Form III, 3d - 7th position



Form IV, 7th - 12th position



THREE-OCTAVE DIATONIC SCALES

Three-octave scales are possible in the keys E through B—eight majors and their enharmonic minors. Basically, the fingerings of three-octave scales reflect the combination of Form III and Form IV fingerings. However, shift points vary slightly for the sake of expediency, particularly in the case of rapid 16th note execution. Scales are presented chromatically up the fingerboard.

E Major

The E Major scale is shown in two staves. The first staff contains the ascending scale (E4 to E6) with fingerings: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4. The second staff contains the descending scale (E6 to E4) with fingerings: 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1. Shift points are indicated by brackets and circled numbers 1 through 6.

E minor

The E minor scale is shown in two staves. The first staff contains the ascending scale (E4 to E6) with fingerings: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4. The second staff contains the descending scale (E6 to E4) with fingerings: 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1. Shift points are indicated by brackets and circled numbers 1 through 6.

* step-shift; the thumb remains fixed as a pivot

F Major

The F Major scale is shown in two staves. The first staff contains the ascending scale (F4 to F6) with fingerings: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4. The second staff contains the descending scale (F6 to F4) with fingerings: 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1. Shift points are indicated by brackets and circled numbers 1 through 6.

F minor

The F minor scale is shown in two staves. The first staff contains the ascending scale (F4 to F6) with fingerings: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4. The second staff contains the descending scale (F6 to F4) with fingerings: 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1. Shift points are indicated by brackets and circled numbers 1 through 6.

* see above; the same shift is used for all descending minor scales

F# Major

Two staves of musical notation for the F# Major scale. The top staff shows the ascending scale with fingerings: 2, 1, 2, 1, 2, 3, 4, 1, 3, 1, 2, 4, 1, 2, 4, 1, 3. The bottom staff shows the descending scale with fingerings: 4, 3, 1, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 2, 1. Both staves include circled numbers 1 through 6 indicating specific fingerings for the notes.

F# minor

Two staves of musical notation for the F# minor scale. The top staff shows the ascending scale with fingerings: 1, 3, 1, 1, 3, 4, 1, 3, 1, 3, 4, 1, 3, 4, 1, 3. The bottom staff shows the descending scale with fingerings: 4, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 3, 1, 4. Both staves include circled numbers 1 through 6 indicating specific fingerings for the notes.

G Major

Two staves of musical notation for the G Major scale. The top staff shows the ascending scale with fingerings: 2, 1, 2, 1, 2, 3, 4, 1, 3, 1, 2, 4, 1, 2, 4, 1, 3. The bottom staff shows the descending scale with fingerings: 4, 3, 1, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 2, 1. Both staves include circled numbers 1 through 6 indicating specific fingerings for the notes.

G minor

Two staves of musical notation for the G minor scale. The top staff shows the ascending scale with fingerings: 1, 3, 1, 3, 4, 1, 3, 1, 3, 4, 1, 3, 4, 1, 3. The bottom staff shows the descending scale with fingerings: 4, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 3, 1, 4. Both staves include circled numbers 1 through 6 indicating specific fingerings for the notes.

A $\flat$ Major

Ascending scale: A $\flat$ 4, B $\flat$ 4, C5, D5, E5, F5, G5, A5, B5, C6, D6, E6, F6, G6, A6. Fingering: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4.

Descending scale: A5, G5, F5, E5, D5, C5, B $\flat$ 4, A $\flat$ 4. Fingering: 4, 3, 2, 1, 4, 3, 2, 1.

G $\sharp$ minor

Ascending scale: G $\sharp$ 4, A $\sharp$ 4, B $\sharp$ 4, C $\sharp$ 5, D $\sharp$ 5, E $\sharp$ 5, F $\sharp$ 5, G $\sharp$ 5, A $\sharp$ 5, B $\sharp$ 5, C $\sharp$ 6, D $\sharp$ 6, E $\sharp$ 6, F $\sharp$ 6, G $\sharp$ 6. Fingering: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4.

Descending scale: G $\sharp$ 5, F $\sharp$ 5, E $\sharp$ 5, D $\sharp$ 5, C $\sharp$ 5, B $\sharp$ 4, A $\sharp$ 4, G $\sharp$ 4. Fingering: 4, 3, 2, 1, 4, 3, 2, 1.

A Major

Ascending scale: A4, B4, C5, D5, E5, F $\sharp$ 5, G $\sharp$ 5, A5, B5, C6, D6, E6, F $\sharp$ 6, G $\sharp$ 6, A6. Fingering: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4.

Descending scale: A5, G $\sharp$ 5, F $\sharp$ 5, E5, D5, C5, B4, A4. Fingering: 4, 3, 2, 1, 4, 3, 2, 1.

A minor

Ascending scale: A4, B4, C5, D5, E5, F $\sharp$ 5, G $\sharp$ 5, A5, B5, C6, D6, E6, F $\sharp$ 6, G $\sharp$ 6, A6. Fingering: 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4.

Descending scale: A5, G $\sharp$ 5, F $\sharp$ 5, E5, D5, C5, B4, A4. Fingering: 4, 3, 2, 1, 4, 3, 2, 1.

B $\flat$ Major

Ascending scale: B $\flat$ 4, C5, D5, E5, F5, G5, A5, B5. Fingering: 2, 4, 1, 2, 4, 3, 4, 1, 3, 1, 2, 4, 1, 2, 4, 1, 3. Breath marks: 6, 5, 4, 3, 2, 1.

Descending scale: B $\flat$ 4, A5, G5, F5, E5, D5, C5, B $\flat$ 4. Fingering: 4, 3, 1, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 3, 2, 1. Breath marks: 2, 3, 4, 5, 6.

B $\flat$ minor

Ascending scale: B $\flat$ 4, C5, D5, E5, F5, G5, A5, B $\flat$ 5. Fingering: 1, 3, 4, 1, 2, 4, 1, 3, 1, 3, 4, 1, 3, 4, 1, 3. Breath marks: 6, 5, 4, 3, 2, 1.

Descending scale: B $\flat$ 4, A5, G5, F5, E5, D5, C5, B $\flat$ 4. Fingering: 4, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 3, 1, 4, 3, 2, 1. Breath marks: 2, 3, 4, 5, 6.

B Major

Ascending scale: B4, C5, D5, E5, F5, G5, A5, B5. Fingering: 2, 4, 1, 2, 4, 3, 4, 1, 3, 1, 2, 4, 1, 2, 4, 1, 3. Breath marks: 6, 5, 4, 3, 2, 1.

Descending scale: B5, A5, G5, F5, E5, D5, C5, B4. Fingering: 4, 3, 1, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 3, 2, 1. Breath marks: 2, 3, 4, 5, 6.

B minor

Ascending scale: B4, C5, D5, E5, F5, G5, A5, B5. Fingering: 1, 3, 4, 1, 2, 4, 3, 1, 3, 4, 1, 3, 4, 1, 3. Breath marks: 6, 5, 4, 3, 2, 1.

Descending scale: B5, A5, G5, F5, E5, D5, C5, B4. Fingering: 4, 4, 2, 1, 4, 2, 1, 3, 1, 4, 3, 1, 4, 3, 1, 4, 3, 2, 1. Breath marks: 4, 3, 4, 5, 6.

DEVELOPING VELOCITY IN SCALES

For the serious student, the achievement of brilliant scale-speed is a main goal. Rapid scales unlock the door to some of the most impressive items in the repertoire, such as the Bach *Chaconne* or the Rodrigo Concertos. Beyond that, however, there is the generally heightened coordination (and confidence!) gained by pushing one's potential to its limit in single-note playing.

- How fast is fast?

The upper limit of the player's ability is generally the best speed at which he or she can execute accurately a two-octave diatonic major scale (such as the Form I or II) in 16th notes, i.e., four to each click of the metronome. More complex or longer scale passages will peak at a lesser speed. With this criterion in mind, the following is a guide to achievement levels:

C Major Form I Scale

LEVEL	METRONOME SETTING (16TH NOTES)	
I. Basic Competence	 = 66	(or  = 132)
II. Beginning Fluency	 = 92	(or  = 184)
III. Advanced Fluency	 = 116	
IV. Virtuoso	 = 132+	

- How do I achieve fluency in scale speed?

(1) First, practice for accuracy: scales must be memorized securely! Accuracy *always* precedes speed. *Never* practice mistakes.

(2) When scales are memorized, concentrate on the staccato touch discussed above (p. 5). Listen for sharply-etched, crisp-sounding notes; *feel* the active resistance of the nails. This helps guarantee that the hands are synchronized, as well as shortening the stroke of the index and middle fingers. A wide, "goose-step" style of alternation limits speed by wasting movement. Economy of right-hand finger action is essential!

(3) When working for speed, do not push down into the string, but play straight across. The "push" into the stroke described on pp. 4-6, while needed for volume and tone in most playing, does not allow the quickest movement of the fingers. For *very* fast scale-playing, economy of movement takes precedence over other considerations, and thus a shallower attack is necessary.

(4) In line with the above point, keep the right-hand wrist low—indeed almost touching the top of the instrument. Also keep the thumb braced on the sixth string for support, sliding the thumb to the rear (but maintaining its contact with the face of the guitar) in order to play the 5th and 6th strings.

• How do I get from fluency to virtuoso level?

(1) Play more softly — speed and volume are inversely correlated.

(2) Concentrate on the crispness of left hand attack; feel a small power-surge behind each finger, as if playing an ascending slur.

(3) Emphasize the beat by accenting: , etc. Use a rhythmic formula such as the following to further enhance your "feel" of the pulse points:



(4) Practice from different points in the scale; for example, in the scale above start at the first high B to work on the descending portion and the shift.

In working toward speed increases at any level, keep a diary of your progressive metronome settings for a month of sustained practice. With practice time of about a half-hour per day, increases of 10-15 percent are a reasonable goal, and increases of 20 percent not uncommon!

SCALES BEYOND THE DIATONIC

The octave subdivides in different ways to produce scales other than diatonic. Principal among these are the chromatic, whole-tone, and diminished scales. These scales have been used often in modern music, including jazz. Their practice will further familiarize the serious student with idiosyncrasies of the fingerboard, as well as provide challenging material for left-hand dexterity. Practice in eighth-note rhythm as shown, with gradually increasing metronome settings, but always within the limit of accuracy.

1. CHROMATIC SCALES

Chromatic scales subdivide the octave into 12 semitones, or consecutive half-steps. When playing chromatic scales, be sure to maintain the arch and separation of fingers. Ascending, successive fingers remain down, then lift as one at each string-change. Descending, fingers attack and release in turn (don't attempt to "plant" them in advance; to do so inhibits dexterity).

First Position Chromatic Scale



Moveable Chromatic Scales

There are three moveable forms of the chromatic scale, two beginning on the sixth string, one on the fifth. They are shown as played from the fifth fret, but of course they may be played elsewhere. Notice the difference between ascending and descending fingerings.



Four staves of musical notation for a chromatic scale exercise. Each staff contains a sequence of notes with fingerings (1-4) and a bracketed number below indicating a specific fingering pattern. The notes are chromatic, moving up and down the scale.

Three-Octave Chromatic Scale

The scale below encompasses most of the usable fingerboard in an interesting and practical form.

Three staves of musical notation for a three-octave chromatic scale exercise. Each staff contains a sequence of notes with fingerings (1-4) and a bracketed number below indicating a specific fingering pattern. The notes are chromatic, moving up and down the scale.

2. WHOLE-TONE SCALES

Whole-tone scales divide the octave into six whole-steps, producing a harmonically indeterminate, rather mysterious-sounding scale. Technically (or musically) there are only two whole-tone scales. Beginning on E, the sequence of notes is E-F#-G#-A#-C-D; on F, it is F-G-A-B-C#-D#. Entering the scale on any note results in one or the other sequence. However, fingerings for the whole-tone scales show some interesting variations, especially the three moveable forms.

First Position Whole-Tone Scales

Moveable Whole-Tone Scales

Each of the above three scales can be played at other positions. They can also be connected chromatically as shown below, progressing up the fingerboard.

(End of previous scale)

3. DIMINISHED SCALES

The diminished scale is composed of alternate whole and half-steps, with eight notes to the octave. Since any scale repeats the notes of the scales a minor third above and below it, there are only three different diminished scales. Compare the one-octave scales below, shown in a first-position fingering.



The diminished scale may be played in the order whole-step, half-step, or half-step, whole-step. The color of the scale differs somewhat, depending on which sequence is used. Generally, the half-step, whole-step scale has a wider harmonic application and is the one shown here. Fingerings are given for C (Eb, F#, A) scales only; played at other positions, they produce the other diminished scales. Scales also may be connected chromatically up the fingerboard in the manner shown above for the moveable whole-tone scales.

Moveable Two-Octave Diminished Scales

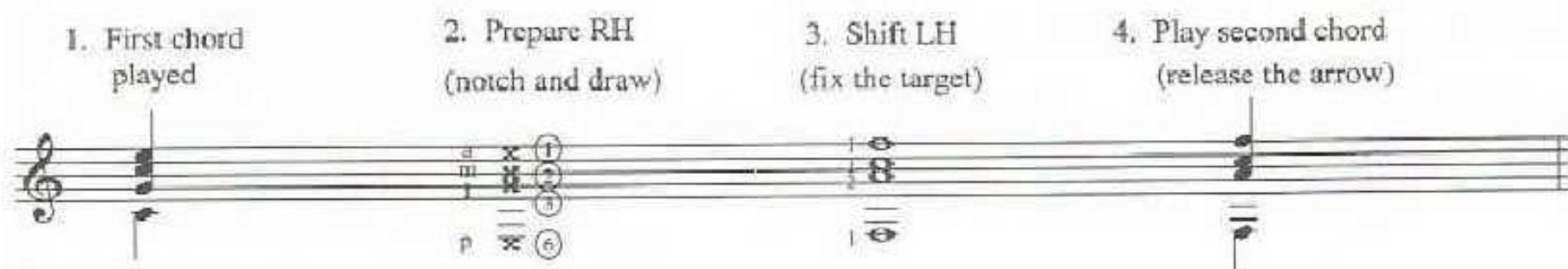


SECTION II: CHORDS AND ARPEGGIOS

SYSTEMATIC CADENCES

Cadences are progressions of voice-led primary chords. The practice of cadences serves several purposes:

- **Chordal knowledge.** It is one of the anomalies of the classical guitar that highly-trained students often cannot play common chord progressions from memory. Practicing the following patterns should lead to memorization of standard major, minor, and dominant 7th chord forms in voicings appropriate to the classical guitar.
- **Fingerboard comprehension.** Systematic cadences use the successive fingerboard positions available for the primary chords of a given key. Since such chords are the basic harmonic underpinning of most music, understanding their orderly sequence enhances the player's mental and musical grasp of the fingerboard.
- **Left Hand strength and dexterity.** The various curvatures and spacings of the fingers, as well as the many bar chords, will challenge the hand of a developing player. Mastery of these "grips" marks a definite plateau of skill.
- **Right Hand touch and synchronization.** Cadences should be practiced according to the rule of synchronization: the right hand prepares or "plants," before the left hand moves. Consider a comparison with archery (in view of the probable origin of stringed instruments, a pretty good one, too!); On all chord changes, the right hand fingers lock in, with nails engaged and downward flesh-pressure (the arrow notched and drawn); with the right hand thus securing the strings, the left hand makes its chord change (the target sighted and fixed); then, with a distinct sense of "releasing" the string — not plucking — the right hand executes (the arrow in flight). The process is shown for a C to F chord below.



When the technique is being learned, or practiced for maximum control, it results in an *abrupt* cut-off of the preceding chord. As the player develops the feel for it, the preparation becomes more relaxed and intuitive, with less and less of a staccato effect. When mastered, the technique affords a command of all possible articulations, from the sharpest staccato to the silkiest legato.

In all cases, the tone-quality of the chords played is the measure of the player's skill. Generally, a downward push during the preparation enhances resonance. But *listen* to what the fingers produce! To hear and appreciate the beauty of a well-played chord is a hallmark of the serious, accomplished player.

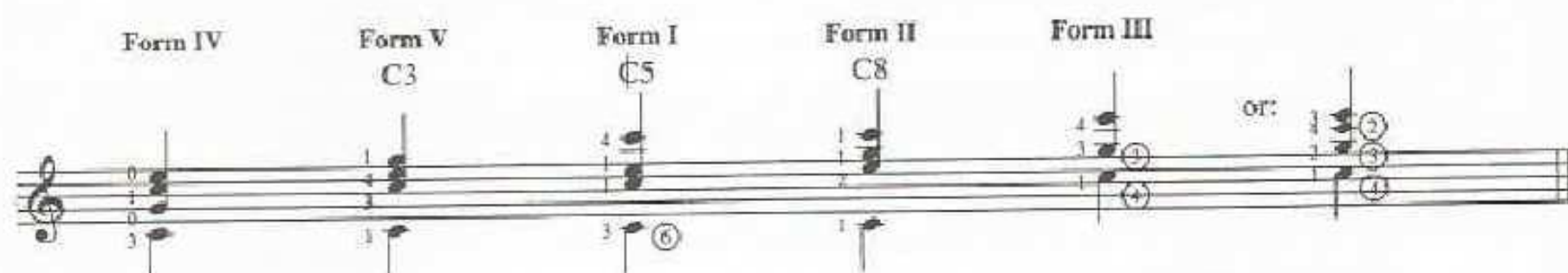
RECURRING CHORD FORMS: THE FINGERBOARD SYSTEM

There are five basic forms for major, minor, and dominant 7th chords. Moreover, these correspond to the two-octave diatonic scales in the way they lie upon the fingerboard.

The chord forms are shown below in two ways: first in open position; then in the corresponding transposable fingering. Note that most of the open position fingerings are standard "folksinger" chord formations played in a "classical" four-note voicing with the root in the bass. The transposable or moveable forms generally require a bar and can be played in any position of the free fingerboard.

	Form I		Form II		Form III		Form IV		Form V	
Major	G	A ^b	E	F	D	E ^b	C	D ^b	A	B ^b
Minor	G ^m	A ^b m	E ^m	F ^m	D ^m	E ^b m	C ^m	D ^b m	A ^m	B ^b m
Dom. 7th	G7	A ^b 7	E7	F7	D7	E ^b 7	C7	D ^b 7	A7	B ^b 7

Just as you can play a scale in successive positions up the fingerboard, so can you play a chord in successive positions, following a similar pattern of recurring forms. Thus, for a C major chord, the sequence of chord forms is:



The chords above the open position C chord are nothing other than moveable versions of the open position A, G, E, and D chords. The same principle of recurrence holds for major, minor, and dominant 7th chords in all keys. This fact underlies the fingerboard chord system, and gives a handy way to remember the sequence: C A G E D. (Starting with an A chord, it is AGEDC; with a G family chord, GEDCA, and so on.)

Since this is so, we can also play cadences in successive positions up the fingerboard, using the appropriate barred chord forms. For each key, these cadences will simply duplicate the general appearance of *open-position* cadences, although played at higher positions of the fingerboard.

Not every chord form will be used in each key. For most keys, the free fingerboard permits only four cadence patterns. Also, in minor keys, the cadences based on Form IV are omitted since they are awkward as well as partially duplicated by Form III and Form V cadences. With these exceptions, the following cadences provide an interlocked and overlapping system of chords encompassing the whole fingerboard.

The keys covered below are those that are most common to music for the classical guitar and therefore have the most practical relevance. The sequence of chords is, in all cases, Tonic - Subdominant - Tonic $\frac{6}{4}$ (i.e., with 5th in the bass) - Dominant 7th - Tonic.

CADENCES IN THE PRINCIPAL KEYS

C Major

Chords: C F C⁶ G7 C³

Chords: C⁵ C⁵ C⁵ C⁸ C¹⁰ C⁸

A minor

Chords: Am Dm Am⁶ E7 C⁵ C⁷ C⁵ C¹⁰ C⁸

G Major

Chords: G C G⁶ D7 C³ C⁵ C³ C⁵ C⁷ C⁸ C⁷

*Chords in Form I minor, Form III major, and occasionally elsewhere are reduced to three notes for feasibility of fingering.

E minor

Chords: Em Am Em⁶ B7

First system of musical notation for E minor. It consists of two staves. The top staff has a treble clef and a key signature of one sharp (F#). The bottom staff has a bass clef. The music is in 4/4 time. The first four measures show chords: Em (E2, G2, B2), Am (A2, C3, E3), Em⁶ (E2, G2, B2, D3), and B7 (B2, D3, F#3, A3). The fifth measure is a whole rest. The sixth measure shows a C5 chord (C5, E5, G5, B5). The seventh measure shows a C2 chord (C2, E2, G2, B2). The eighth measure is a whole rest.

D Major

Chords: D G D⁶ A7

First system of musical notation for D Major. It consists of two staves. The top staff has a treble clef and a key signature of two sharps (F# and C#). The bottom staff has a bass clef. The music is in 4/4 time. The first four measures show chords: D (D2, F#2, A2), G (G2, B2, D3), D⁶ (D2, F#2, A2, B2), and A7 (A2, C#3, E3, G3). The fifth measure is a whole rest. The sixth measure shows a C2 chord (C2, E2, G2, B2). The seventh measure shows a C3 chord (C3, E3, G3, B3). The eighth measure shows a C2 chord (C2, E2, G2, B2).

B minor

Chords: Bm Em Bm⁶ F#7

First system of musical notation for B minor. It consists of two staves. The top staff has a treble clef and a key signature of two sharps (F# and C#). The bottom staff has a bass clef. The music is in 4/4 time. The first four measures show chords: Bm (B2, D3, F#3), Em (E2, G2, B2), Bm⁶ (B2, D3, F#3, A3), and F#7 (F#2, A2, C#3, E3). The fifth measure is a whole rest. The sixth measure shows a C2 chord (C2, E2, G2, B2). The seventh measure shows a C7 chord (C2, E2, G2, B2, D3). The eighth measure shows a C9 chord (C2, E2, G2, B2, D3, F#3).

A Major

Chords: A D A⁶ E7

C2 C2 C5 C7

First system of musical notation for A Major. It consists of two staves. The top staff has a treble clef and a key signature of two sharps (F# and C#). The bottom staff has a bass clef. The music is in 4/4 time. The first staff contains four measures of chords: A (0 2 4 2), D (2 4 2 0), A⁶ (0 2 4 2), and E7 (0 2 4 2). The second staff contains four measures of chords: C2 (4 2 1 4), C2 (4 2 1 4), C5 (1 3 2 1), and C7 (1 3 2 1). Fingering numbers are indicated above the notes.

F# minor

Chords: F#m C2 Bm F#m⁶ C#7

C2 C4 C7 C4

First system of musical notation for F# minor. It consists of two staves. The top staff has a treble clef and a key signature of three sharps (F#, C#, and G#). The bottom staff has a bass clef. The music is in 4/4 time. The first staff contains four measures of chords: F#m (1 3 4 2), C2 (1 3 4 2), Bm (1 3 4 2), and F#m⁶ (1 3 4 2). The second staff contains four measures of chords: C2 (1 3 4 2), C4 (1 3 4 2), C7 (1 3 4 2), and C4 (1 3 4 2). Fingering numbers are indicated above the notes.

E Major

Chords: E A E⁶ B7

C2 C2 C4 C5 C4

First system of musical notation for E Major. It consists of two staves. The top staff has a treble clef and a key signature of three sharps (F#, C#, and G#). The bottom staff has a bass clef. The music is in 4/4 time. The first staff contains four measures of chords: E (0 2 4 2), A (2 4 2 0), E⁶ (0 2 4 2), and B7 (0 2 4 2). The second staff contains four measures of chords: C2 (4 2 1 4), C2 (4 2 1 4), C4 (1 3 2 1), C5 (1 3 2 1), and C4 (1 3 2 1). Fingering numbers are indicated above the notes.

C $\sharp$ minorChords: C $\sharp$ m F $\sharp$ m C $\sharp$ m $\flat$ G $\sharp$ 7

Chord progressions for C $\sharp$ minor:

Top staff: C2, C1, C4

Bottom staff: C9, C9

B Major

Chords: B E B $\flat$ F $\sharp$ 7

Chord progressions for B Major:

Top staff: C2

Bottom staff: C4, C4, C4, C7, C9, C7

F Major

Chords: F B $\flat$ F $\flat$ C7

Chord progressions for F Major:

Top staff: C1, C3

Bottom staff: C5, C6, C5, C8

D minor

Chords: Dm Gm Dm⁶ A7

First system of musical notation for D minor. It consists of two staves. The top staff has a treble clef and a key signature of one flat (Bb). It contains four measures of chords: Dm (C3), Gm (C3), Dm⁶ (C3), and A7 (C5). The bottom staff has a bass clef and contains four measures of bass notes: C3, G2, D2, and A2. Fingering numbers (1, 2, 3, 4) are indicated above the notes.

B^b MajorChords: B^b E^b B^b₄ F7

First system of musical notation for B^b Major. It consists of two staves. The top staff has a treble clef and a key signature of two flats (Bb, Eb). It contains four measures of chords: B^b (C1), E^b (C3), B^b₄ (C3), and F7 (C3). The bottom staff has a bass clef and contains four measures of bass notes: C1, G1, D1, and F1. Fingering numbers (1, 2, 3, 4) are indicated above the notes.

G minor

Chords: Gm Cm Gm⁶ D7

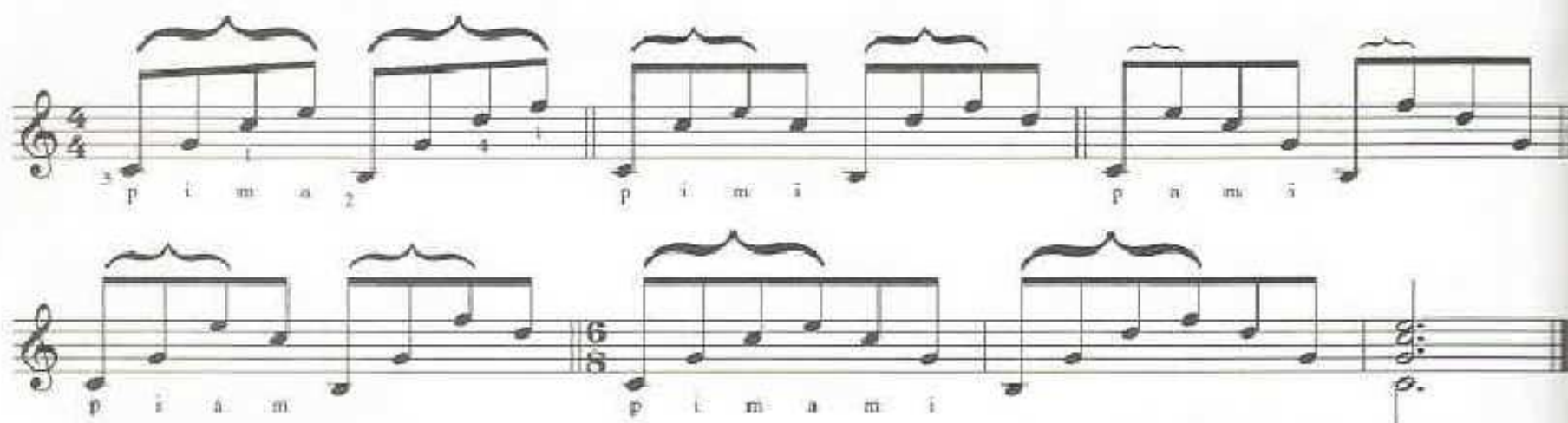
First system of musical notation for G minor. It consists of two staves. The top staff has a treble clef and a key signature of two flats (Bb, Eb). It contains four measures of chords: Gm (C3), Cm (C3), Gm⁶ (C3), and D7 (C5). The bottom staff has a bass clef and contains four measures of bass notes: C3, G2, D2, and A2. Fingering numbers (1, 2, 3, 4) are indicated above the notes.

ARPEGGIOS

In classical guitar technique, the term *arpeggio* refers to cyclical movement patterns of the thumb and fingers in playing a chord. If there is a royal road to right hand development, it is surely the study of arpeggios. The number of possible arpeggio patterns is virtually endless; however, if practiced correctly, a limited number of core patterns is more than adequate to develop the hand.

For the intermediate-level player, the practice of arpeggios amounts to a course of study in itself. The more experienced player uses them as warm-up exercises, or intensively from time to time as a mini-refresher course for the right hand. The basic goals of arpeggio study are (1) a strong, accurate touch with sonorous tone, and (2) mobility and independence of the fingers.

These goals require the cultivation of the *prepared attack*, as discussed above, p. 34. Preparation seats the nail firmly against the string, with down-and-in pressure from the fingers — like notching an arrow and drawing the bow-string. The execution, like the shooting of the arrow, is essentially the release of the string. When the notes lie in an ascending direction, they are prepared *simultaneously* as for a chord. In the following arpeggios, for example, the preparation is as indicated by brackets:



In slow practice, simultaneous preparation, or "planting", results in an abrupt cutoff of sound with each repetition of the right hand cycle as well as each chord change. Don't worry about the loss of sound — in fact, listen for it. As the technique becomes more intuitive, the preparation time shortens to practically zero, with no perceptible loss of sound. In really fast playing, the fingers will no longer actually plant, since there isn't sufficient time. But, as a result of correct practice, they will stay very close to the strings, and when they move, feel as if they are chained together.

Since the purpose of arpeggio exercises demands that the player's attention be focused upon right-hand finger action, left-hand involvement must be simple and repetitive. The exercises below are based on two first-position chord sequences, one in C, the other in Am. The exercises are paired, with the first written for the key of C progression, the second for the Am. In all cases, the patterns may be switched, in the interest of variety.

It cannot be emphasized enough that there is no point to careless practice of these exercises. They achieve the best results when played slowly with controlled finger-action. Listen actively for resonant equality of dynamic emphasis, and accurate rhythm. If there is any hint of a jagged acoustic contour (uneven tone or volume, dropped notes, rhythmic uncertainty of any sort), then the only remedy is to concentrate more intently on the mechanics of the exercise at a slower speed.

However, as you become more secure, you can — and should — strive for fluency. Use the metronome to keep your rhythmic pulse exact, to increase your speed, and to document your progress. Although it is never advisable to play faster than you can play accurately, you should still push your technical limits. Do not make a conscious preparation effort when trying for maximum speed; do, however, play forcefully.

Listed below are some metronome ranges for a few common arpeggio patterns as a general guide to speed at different levels of achievement:

<u>Metronome setting (thumb strokes)</u>			
<u>Pattern</u>	<u>Intermediate</u>	<u>Advanced</u>	<u>Virtuoso</u>
p i m i	104	120	138
p i m a	112	132	144
p a m i	96	112	126
p i m a m i	88	104	116

BASIC ARPEGGIOS OF INCREASING COMPLEXITY, THUMB AND THREE FINGERS

Play each exercise twice, exchanging a. and b. right-hand patterns (a., a. with b. right-hand pattern; b., b. with a. right-hand pattern).

1.

Exercise 1 consists of two parts, a and b, each with two staves of music. Part a is in 4/4 time and features a right-hand pattern of eighth notes (p, i, m, a) and a left-hand pattern of eighth notes (3, 2, 0, 3). Part b is in 4/4 time and features a right-hand pattern of eighth notes (p, a, m, i) and a left-hand pattern of eighth notes (0, 4, 2, 0). Both parts include a central section marked 'C 1' with a repeat sign.

2.

Exercise 2 consists of two parts, a and b, each with two staves of music. Part a is in 4/4 time and features a right-hand pattern of eighth notes (p, i, a, m) and a left-hand pattern of eighth notes (3, 2, 0, 3). Part b is in 4/4 time and features a right-hand pattern of eighth notes (p, a, i, m) and a left-hand pattern of eighth notes (0, 4, 2, 0). Both parts include a central section marked 'C 1' with a repeat sign.

3.

a. *P m i a P m i a*

b. *P m a i P m a i*

4.

a. *p i m i p i a i p i m i p i a i*

b. *p m i m p a i a p m i m p a i a*

5.

a. *p a m i p i m a p a m i p i m a*

b. *p i m a p a m i p i m a p a m i*

6.

a. *p i m a m i p i m a m i*

b. *p a m i m a p a m i m a*

7.

Handwritten musical notation for exercise 7, consisting of two systems (a and b) with four staves each.

System a:

- Staff 1: Treble clef, 4/4 time. Melody: *p i m i a m*. Bass line with fingerings: 3, 2, 0, 3, 3, -2, 0, 3.
- Staff 2: Treble clef, 4/4 time. Melody: *p i m i a m p*. Bass line with fingerings: 3, 2, 3, 0, -2, 3, -3, 0. A slur labeled *C1* covers the first four measures.

System b:

- Staff 3: Treble clef, 4/4 time. Melody: *p a m a i m*. Bass line with fingerings: 3, 4, -2, 4, 3, -2, 4.
- Staff 4: Treble clef, 4/4 time. Melody: *p a m a i m p*. Bass line with fingerings: 3, 4, 0, 0, 3, 2, 2, 1. A slur covers the last four measures.

8.

Handwritten musical notation for exercise 8, consisting of two systems (a and b) with four staves each.

System a:

- Staff 1: Treble clef, 4/4 time. Melody: *p i p m i a m a i m p i p i p m i a m a i m p i*. Bass line with fingerings: 3, 2, 3, 0, 3, 2, 3.
- Staff 2: Treble clef, 4/4 time. Melody: *p i p m i a m*. Bass line with fingerings: 3, 2, -3, 4, 3, 1, 0, 3. A slur labeled *C1* covers the first four measures.

System b:

- Staff 3: Treble clef, 4/4 time. Melody: *p a i m p i p i p m i a p a i m p i p i p m i a*. Bass line with fingerings: 3, 2, -3, 0, -2, 1, 3, -2, -3, 0, 2.
- Staff 4: Treble clef, 4/4 time. Melody: *p a i m p i p*. Bass line with fingerings: 4, -2, 0, 2, -2, 1. A slur covers the last four measures.

ARPEGGIOS WITH THUMB AND FINGERS PLAYED TOGETHER

Play each exercise twice, exchanging a. and b. right-hand patterns.

1.

Exercise 1 consists of two parts, a and b, each with two staves of music. The first staff of each part contains a treble clef, a 4/4 time signature, and a series of eighth notes with fingerings (i, m, a, m, i, m, a, m) written above. The second staff contains a bass clef and a series of eighth notes with fingerings (p, 3, 2, 0, 3, 2, 0, 3) written below. A bracket labeled 'C 1' spans the first four measures of the second staff in both parts. The third staff of each part contains a treble clef and a series of eighth notes with fingerings (a, m, i, m, a, m, i, m) written above. The fourth staff contains a bass clef and a series of eighth notes with fingerings (p, 4, 2, 0, 4, 2, 0, 4) written below. A bracket labeled 'C 1' spans the first four measures of the fourth staff in both parts. The fifth staff of each part contains a treble clef and a series of eighth notes with fingerings (i, m, a, m, p) written above. The sixth staff contains a bass clef and a series of eighth notes with fingerings (p, 3, 2, 0, 3, 2, 0, 3) written below. A bracket labeled 'C 1' spans the first four measures of the sixth staff in both parts.

2.

Exercise 2 consists of two parts, a and b, each with two staves of music. The first staff of each part contains a treble clef, a 4/4 time signature, and a series of eighth notes with fingerings (m, i, m, a, m, i, m, a) written above. The second staff contains a bass clef and a series of eighth notes with fingerings (p, 3, 2, 0, 3, 2, 0, 3) written below. A bracket labeled 'C 1' spans the first four measures of the second staff in both parts. The third staff of each part contains a treble clef and a series of eighth notes with fingerings (m, a, m, i, m, a, m, i) written above. The fourth staff contains a bass clef and a series of eighth notes with fingerings (p, 4, 2, 0, 4, 2, 0, 4) written below. A bracket labeled 'C 1' spans the first four measures of the fourth staff in both parts. The fifth staff of each part contains a treble clef and a series of eighth notes with fingerings (m, i, m, a, p) written above. The sixth staff contains a bass clef and a series of eighth notes with fingerings (p, 3, 2, 0, 3, 2, 0, 3) written below. A bracket labeled 'C 1' spans the first four measures of the sixth staff in both parts.

3.

Exercise 3 consists of two systems of piano and violin staves. The piano part is written in 4/4 time and features a sequence of eighth-note chords. The first system includes fingerings (1, 2, 3) and articulation marks (accents) above the notes. The violin part is written in 4/4 time and features a sequence of eighth-note chords. The first system includes fingerings (1, 2, 3) and articulation marks (accents) above the notes. The second system includes a fermata over the final measure.

4.

Exercise 4 consists of two systems of piano and violin staves. The piano part is written in 4/4 time and features a sequence of eighth-note chords. The first system includes fingerings (1, 2, 3) and articulation marks (accents) above the notes. The violin part is written in 4/4 time and features a sequence of eighth-note chords. The first system includes fingerings (1, 2, 3) and articulation marks (accents) above the notes. The second system includes a fermata over the final measure.

Use rest-stroke on melody (up-stem notes).

5.

Exercise 5 consists of two parts, a and b, each with two staves of music in 4/4 time. The melody is written on the upper staff, and the accompaniment is on the lower staff. The exercise focuses on using a rest-stroke on up-stem notes.

Part a: The melody starts with a quarter note 'a' (A4), followed by a quarter note 'g' (G4), and then a quarter note 'f' (F4). The accompaniment consists of eighth notes: p, m, i, m, p, m, i, m, p, m, i, m, p, m, i, m. A bracket labeled 'C 1' spans the first four measures of the accompaniment.

Part b: The melody starts with a quarter note 'a' (A4), followed by a quarter note 'g' (G4), and then a quarter note 'f' (F4). The accompaniment consists of eighth notes: p, i, m, i, p, i, m, i, p, i, m, i, p, i, m, i. A bracket labeled 'C 1' spans the first four measures of the accompaniment.

Use rest-stroke on melody (up-stem notes).

6.

Exercise 6 consists of two parts, a and b, each with two staves of music in 4/4 time. The melody is written on the upper staff, and the accompaniment is on the lower staff. The exercise focuses on using a rest-stroke on up-stem notes.

Part a: The melody starts with a quarter note 'a' (A4), followed by a quarter note 'm' (M4), and then a quarter note 'a' (A4). The accompaniment consists of eighth notes: p, i, p, i, p, i, p, i, p, i, p, i, p, i, p, i. A bracket labeled 'C 1' spans the first four measures of the accompaniment.

Part b: The melody starts with a quarter note 'm' (M4), followed by a quarter note 'a' (A4), and then a quarter note 'm' (M4). The accompaniment consists of eighth notes: p, i, p, i, p, i, p, i, p, i, p, i, p, i, p, i. A bracket labeled 'C 1' spans the first four measures of the accompaniment.

7.

Exercise 7 is a four-staff musical piece in 4/4 time. The first staff (labeled 'a') features a treble clef and a key signature of one sharp (F#). It contains a complex rhythmic pattern with eighth and sixteenth notes, including triplets and slurs. Fingerings are indicated by numbers 1-3, and dynamics like 'p' (piano) are marked. The second staff continues the pattern with similar rhythmic complexity. The third staff (labeled 'b') also features a treble clef and a key signature of one sharp, with a similar rhythmic pattern. The fourth staff continues the piece, ending with a final chord. A 'C' time signature change is indicated between the second and third staves.

8.

Exercise 8 is a four-staff musical piece in 4/4 time. The first staff (labeled 'a') features a treble clef and a key signature of one sharp (F#). It contains a complex rhythmic pattern with eighth and sixteenth notes, including triplets and slurs. Fingerings are indicated by numbers 1-3, and dynamics like 'p' (piano) are marked. The second staff continues the pattern with similar rhythmic complexity. The third staff (labeled 'b') also features a treble clef and a key signature of one sharp, with a similar rhythmic pattern. The fourth staff continues the piece, ending with a final chord. A 'C' time signature change is indicated between the second and third staves.

PRACTICING ARPEGGIOS WITH THE CARCASSI "ETUDE 2"

Written as a study in repeated notes, the second of Matteo Carcassi's *25 Melodious Studies*, op. 60, makes an attractive and versatile arpeggio study that may be practiced in various forms. Below are some suggested arpeggio patterns for practice of this piece.

ETUDE NO. 2

Matteo Carcassi

Musical notation for guitar, featuring eight staves of music. The notation includes various musical symbols such as treble clefs, notes, rests, and dynamic markings. Fingerings are indicated by numbers 1-4. The music is in a key with one sharp (F#).

Dynamics and markings include: *mf*, *f*, *sf*, *p*, *a tempo*, *cresc.*, *poco rit.*, and *pp rall.*

Measure numbers are indicated by circled numbers: 5, 7, 8, 10, and 15.

TWO ETUDES BY DIONISIO AGUADO

The following two arpeggio studies from a set of 24 Etudes by Dionisio Aguado (1784-1849) are also excellent pieces for arpeggio practice.

$\text{♩} = 112 - 132$

1

mf *p i m i p i m i*

*Use *p m a m* also as a practice fingering to improve coordination between *m* and *a*.

2

 $\text{♩} = 96 - 108$

f

mf

rit.

p

SECTION III: LEFT HAND DEVELOPMENT

SLURS

Slurs are notes executed by the left hand alone. The technique of ascending slurs is commonly called "hammering on," that of descending slurs "pulling off." A relaxed, powerful slur technique is essential to the serious player's development, because slurs are used for a number of musical purposes:

- to enhance the rhythmic drive of groups of triplets and sixteenth notes.
- to create variety of accent (i.e., dynamic emphasis).
- to achieve legato connections between notes.
- to simplify right hand fingering.
- to produce embellishments, such as trills, mordents, and grace notes.

The practice of slur exercises also serves a more general technical goal: namely, strength and precision of the left hand fingers. Particularly this is so for the weak third and fourth fingers, for which the practice of slurs is invaluable.

ASCENDING SLURS

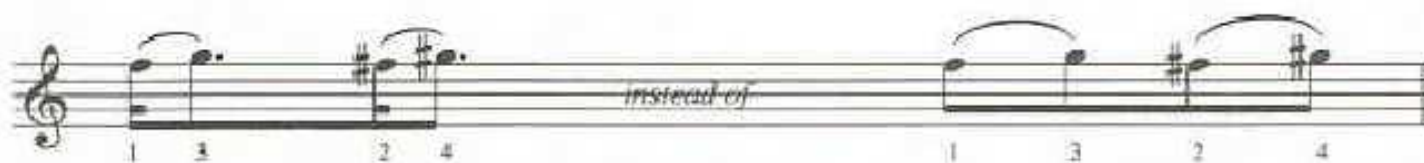
Ascending slurs involve the hammering of a *higher* note by the 2d, 3d, or 4th finger. There are six possible fingering combinations: 1-2, 1-3, 1-4; 2-3, 2-4; 3-4. From these, an endless number of exercises can be derived. However, as in the case of arpeggios, conscientious practice of a relative few is quite sufficient (the operative word being "conscientious"!)

The technique of hammering-on requires that fingers fall accurately and forcefully. In view of that objective, the following are the main *technical* considerations:

- attacking fingers are curved and "hard" at all times; fingertip stays pointed toward fingerboard during lift.
- fall of the fingertip upon the the string is sharp and percussive, as the term "hammer-on" implies. Aim for a small target just behind the metal fret (not the middle of the fret space.)
- finger pivots from knuckle in the attack, but there should also be assistance from the heel of the hand, especially in the case of the 3d and 4th fingers. In fact, movement of the forearm is desirable to amplify the attack of these fingers; "swing" the hand in toward the fingerboard as you play.

Think of this as a micro-comparison to throwing a baseball, where not just the arm, but the whole body is involved. In short, don't inhibit the helpful participation of the arm, but encourage it. A common error is to attempt slurs with a passive or "frozen" arm, using only finger action. In good slur technique, the fingers are assisted by the muscles and the moving mass of the hand, forearm, and even the upper-arm.

The primary *musical* consideration in slur practice is *rhythmic precision*. Slurs are generally practiced and played in simple subdivisions of the beat — eighths, triplets, or sixteenths. These should be as rhythmically exact as if they were all plucked. However, there is a natural tendency to rush the slurred note, producing an unintentional "Scotch snap" effect:



To overcome this common problem, two things will help:

(1) Play an exercise alternately with and without slurs, i.e., plucking each note, comparing the rhythmic quality. Try to make the rhythm identical:



(2) Practice all exercises with intentional dotting that reverses the unintentional emphasis:



Though difficult, this procedure will absolutely smooth out any rhythmic jerkiness caused by rushing.

BASIC ASCENDING SLUR EXERCISES

The following exercises increase in difficulty from simple to more complex. If you are relatively unfamiliar with slur technique, master each one before proceeding to the next. As you become more proficient, omit the first six exercises. Play slowly and forcefully, concentrating on the quality of finger action and the evenness of rhythm. More developed players may play more rapidly; the ultimate goal is fluent, near-reflex execution.

Only the first exercise is written out in full. Thereafter, they are shown in abbreviated form, but the manner of execution is the same for all:

- (1) Play each exercise up the fingerboard to the 9th position.
- (2) Exercises are shown for the first string only. However, you should play them on the second and third strings additionally, or for variety.
- (3) Keep the first finger down at all times! It stabilizes the hand even when it is not required to hold a note. It also serves as a guide-finger on all position shifts.
- (4) Right-hand fingering is i-m rest-stroke throughout; use m-a for variety.

* Remember that the *first* finger is used as a stabilizing guide finger.

5. 3 4 2 4 -2 4 -2 4 2 4

6. 3 4 3 4 -3 4 3 4

7. 1 2 3 4 -1 2 3 4 -1 2 3 4 0

8. 1 3 2 4 -1 3 2 4 -1 3 2 4 0

9. 1 4 2 3 -1 4 2 3 -1 4 2 3 0

10. 1 2 1 3 1 4 -1 2 1 3 1 4 -1 2 1 3 1 4 0

11. 1 2 2 3 3 4 -1 2 2 3 3 4 -1 2 2 3 3 4 0

12. 1 4 2 4 3 4 -1 4 2 4 3 4 -1 4 2 4 3 4 0

DESCENDING SLURS

Just as for ascending slurs, use aggressive curvature and spacing of the fingers: tips right behind the fret-bars, fingers hardened into compact arches. The palm of the hand should be very, very close to the edge of the fingerboard — within an inch when playing the treble strings, and even touching the fingerboard when playing the basses. The further away it is (due to excessive wrist-arch), the more problematic the technique becomes.

The essential mechanism of the slur is a sharp, lateral flex of the fingertip. That is, the fingertip actually *plucks* the string; a common error is weak tip-joint action. However, as for ascending slurs, the hand and arm also participate. Think of the finger as the terminal extension of a hand, wrist, forearm, and even upper arm that constitute *one* integrated power-unit. Don't rely just on a finger-movement, while the hand and arm remain passively "frozen." Instead, permit the heel of the hand and the forearm to support and amplify the finger action with a natural recoil or follow-through. Properly executed, all slurs, whether ascending or descending, involve a constant, active "play" of the arm.

Descending slurs on any string but the first pose the problem of how to avoid inadvertently sounding the next higher string. The solution is to treat these slurs as *left-hand rest strokes*. Flex the tip straight back so that it momentarily rests against (but does not pass over) the next higher string, and then releases up and away from the fingerboard. (Be sure that the release originates from the base-knuckle joint so that the finger doesn't lose its curvature.)

BASIC DESCENDING SLUR EXERCISES

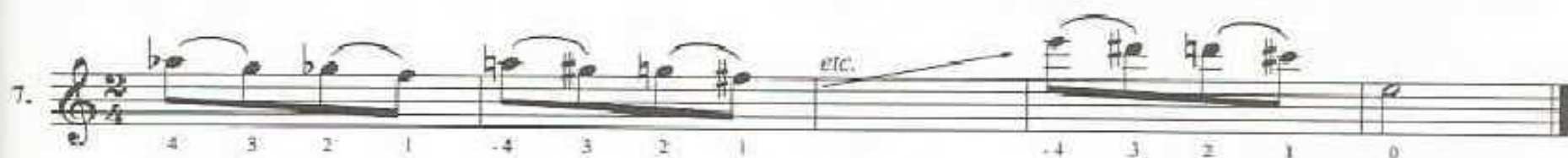
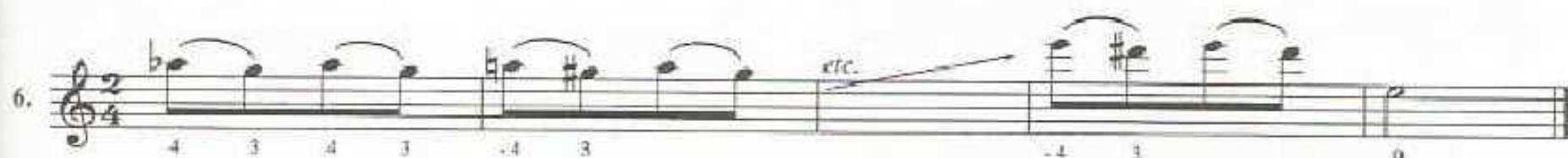
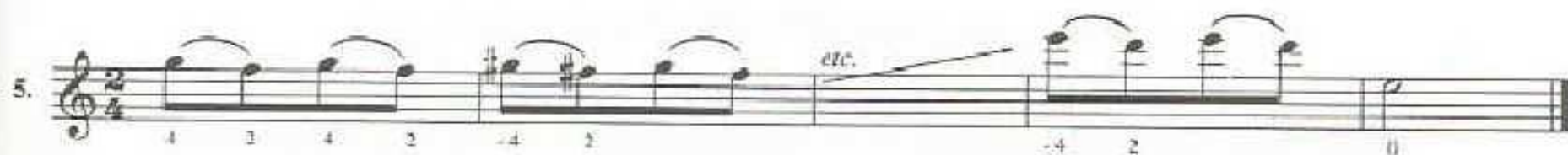
Practice the following exercises in the same manner as the preceding ascending slur exercises. Omit the first six when they can be played easily.

1. *m* *i* *etc.* *m*

2. *etc.* *0*

3. *etc.* *0*

4. *etc.* *0*



ASCENDING AND DESCENDING SLURS COMBINED

Practice in the same manner shown above for basic ascending and descending slurs.
Be sure to practice these patterns on lower strings as well!

1.

2.

3.

4.

5.

6.

7.

8.

9.

TRIPLET SLURS

Practice in the same manner shown above. These are more difficult patterns; quality of finger action is thus most important. Concentrate especially on a crisp, economical tip-attack and flex. Be sure that rhythm is accurate!

The page contains eight musical exercises, numbered 1 through 8, each consisting of a staff with a treble clef and a key signature of one sharp (F#). The exercises are designed to practice triplet slurs.

- Exercise 1:** 2/4 time. Four measures. Measures 1 and 3 start with a slur over a triplet of eighth notes, labeled 'm'. Measures 2 and 4 start with a slur over a triplet of eighth notes, labeled 'i'. Fingering: 1-2-3, 2-3-4, -1-2-3, 2-3-4. Ends with 'etc.'.
- Exercise 2:** 2/4 time. Four measures. Measures 1 and 3 start with a slur over a triplet of eighth notes, labeled 'b'. Measures 2 and 4 start with a slur over a triplet of eighth notes, labeled 'i'. Fingering: 4-3-2, 3-2-1, -4-3-2, 3-2-1. Ends with 'etc.'.
- Exercise 3:** 2/4 time. Four measures. Measures 1 and 3 start with a slur over a triplet of eighth notes, labeled 'b'. Measures 2 and 4 start with a slur over a triplet of eighth notes, labeled 'i'. Fingering: 1-2-4, 4-2-1, -1-2-4, 4-2-1. Ends with 'etc.'.
- Exercise 4:** 2/4 time. Four measures. Measures 1 and 3 start with a slur over a triplet of eighth notes, labeled 'b'. Measures 2 and 4 start with a slur over a triplet of eighth notes, labeled 'i'. Fingering: 1-3-4, 4-3-1, -1-3-4, 4-3-1. Ends with 'etc.'.
- Exercise 5:** 2/4 time. Four measures. Measures 1 and 3 start with a slur over a triplet of eighth notes, labeled 'i'. Measures 2 and 4 start with a slur over a triplet of eighth notes, labeled 'b'. Fingering: 1-3-1, 2-4-2, -1-3-1, 2-4-2. Ends with 'etc.'.
- Exercise 6:** 2/4 time. Four measures. Measures 1 and 3 start with a slur over a triplet of eighth notes, labeled 'b'. Measures 2 and 4 start with a slur over a triplet of eighth notes, labeled 'i'. Fingering: 4-2-4, 3-1-3, -4-2-4, 3-1-3. Ends with 'etc.'.
- Exercise 7:** 3/4 time. Six measures. Measures 1, 3, and 5 start with a slur over a triplet of eighth notes, labeled 'b'. Measures 2, 4, and 6 start with a slur over a triplet of eighth notes, labeled 'i'. Fingering: 1-2-1, 2-3-2, 3-4-3, -1-2-1, 2-3-2, 3-4-3. Ends with 'etc.'.
- Exercise 8:** 3/4 time. Six measures. Measures 1, 3, and 5 start with a slur over a triplet of eighth notes, labeled 'b'. Measures 2, 4, and 6 start with a slur over a triplet of eighth notes, labeled 'i'. Fingering: 4-1-4, 3-2-3, 2-1-2, -4-3-4, 3-2-3, 2-1-2. Ends with 'etc.'.

SLURS ACROSS THE FINGERBOARD

The following exercises should be practiced only after the previous ones have been mastered. For the student who has done that, they offer a higher level of challenge since they require slurs consecutively on each string, moving laterally across the fingerboard. Practice of these exercises will help develop the maximum strength and precision of the left-hand fingers.

Practice each exercise ascending up the fingerboard as indicated, concluding at the 9th position in the manner shown for earlier exercises.

1. 



2. 



3. 



4.

Exercise 4 consists of 12 measures of music in 3/4 time. The first six measures are on a treble clef staff, and the last six are on a bass clef staff. The key signature has one flat (B-flat). The notation includes various note values (quarter, eighth, and sixteenth notes), rests, and accidentals (sharps and flats). Fingerings are indicated by numbers 1-4 above the notes. The exercise concludes with the word "etc." at the end of the sixth measure of the bass staff.

5.

Exercise 5 consists of 12 measures of music in 3/4 time. The first six measures are on a treble clef staff, and the last six are on a bass clef staff. The key signature has one flat (B-flat). The notation includes various note values (quarter, eighth, and sixteenth notes), rests, and accidentals (sharps and flats). Fingerings are indicated by numbers 1-4 above the notes. The exercise concludes with the word "etc." at the end of the sixth measure of the bass staff.

CHROMATIC OCTAVES AND TENTHS

The practice of chromatic octaves and tenths is a real strength- and stretch-developer. In addition, the challenge of moving the fingers in constantly changing pairs will increase the overall gymnastic expertise of the hand.

The preparatory exercise below combines octaves and tenths. Practice chromatically up the fingerboard at least to the fifth position, then descend.



Observe the following points of form:

- The wrist is straight so that hand and forearm form a simple, columnar power-unit, with the palm of the hand very close to the edge of the fingerboard.
- Note the natural changes in the position of the arm during the exercise: close to the body for the octaves (first half of each measure), but further outward for the tenths (second half of each measure).
- Movement impulses overlap — fingers should seem to "crawl" from one grip to the next, producing a maximum legato; avoid sudden, stabbing finger movements.

Similar principles govern the proper practice of the exercises that follow. When you have mastered the first two, try the more difficult versions in triplets.

Octaves



Tenths

[illegible]

The following are shown in ascending form only; they may also be practiced descending in reverse (see examples below *).

Octaves

The image shows a musical score for the song "The Rose Tree". It consists of two staves, both in 2/4 time. The top staff is for the treble clef and the bottom staff is for the bass clef. The key signature has one sharp (F#). The melody is written in the treble staff, and the accompaniment is in the bass staff. The melody features several triplets and a final quarter note. The accompaniment provides a steady bass line with some triplets and rests. The lyrics "The Rose Tree" are written below the bottom staff.

Tenths

The musical score for 'The Rose Tree' is written in 3/4 time. The melody is in the treble clef, and the bass line is in the bass clef. The key signature has one sharp (F#). The score includes several triplet markings (3) and fingerings (1, 2, 3, 4) for both hands. The melody consists of eighth and quarter notes, while the bass line provides a steady accompaniment with eighth and quarter notes.

* Descending Triplet Forms

The image shows two musical exercises on a single staff. The first exercise, titled 'Octaves', is in 2/4 time and consists of two measures. The first measure contains a triplet of eighth notes (G4, A4, B4) and a quarter note (C5). The second measure contains a quarter note (D5), a triplet of eighth notes (E5, F5, G5), and a quarter note (A5). The second exercise, titled 'Tenths', is in 4/4 time and consists of two measures. The first measure contains a quarter note (G4), a quarter note (A4), a quarter note (B4), and a quarter note (C5). The second measure contains a quarter note (D5), a quarter note (E5), a quarter note (F5), and a quarter note (G5). Both exercises are written in treble clef with a key signature of one flat (Bb).

BAR CHORD STRENGTH DEVELOPMENT

Most guitar players can remember all too clearly the struggle to master the bar-chord grip. The challenge of bar chords never really goes away, because at successively higher levels of repertoire, we encounter more and more taxing bar-chord demands. (An excellent and well-known example is the Albeniz "Leyenda," especially measures 38-46.) The ability to execute such passages cleanly and confidently depends upon the available strength in the first dorsal interosseous and adductor muscles — respectively, the outer and inner muscles between the first finger and thumb. Given sufficient work, this muscle area enlarges visibly over a period of several months, while the difficulty of bar-chord playing diminishes in turn.

Practicing the sections of pieces (such as "Leyenda") that contain tough bar-chord requirements is, in the long run, the best way to develop and maintain the necessary strength. However, some supplementary exercises can be very helpful. The exercises below will, for most students, improve the strength and endurance of the bar-chord grip in a relatively short time. They should be practiced intensively for a period of 7-10 minutes a day to achieve the best results. This will create a "peak effect" of fatigue for the muscle-tissue involved, stimulating it to further growth.

Important: do not press too hard with the thumb! The function of the thumb is to supply counterforce to the first finger, but some counterforce is also supplied by body pressure against the back of the instrument. Moreover, be especially sure that the thumb lies somewhat on its side with the tip turned back. This position, with the bones of the thumb locked into passive support, allows the most efficient use of the correct muscles, while preventing needless exertion from the thumb.

The image displays seven musical exercises for guitar, each on a single staff in treble clef. Exercise 1 is in 4/4 time and features a sequence of bar chords with fingerings indicated by numbers 1-4. Exercises C2, C4, C6, C8, C10, and C9 are in 2/4 time and consist of eighth-note patterns over various bar chords. Fingerings are consistently shown for each note. Exercise C9 concludes with a double bar line and a final chord.

Continue with the following patterns:

2. *p i m a m i*

3. *p a m i m a*

4. *p m i a i m*

5. *p a m i m i*

Ascend chromatically to the 9th position as shown:

6. *C2 C3 C9*

7. *p i m a m i m p p*

SECTION IV: EXERCISES IN TECHNICAL AND INTERPRETIVE CONTROL

The exercises in the following pages will enhance your sensitivity to fine points of musicianly practice. Scales, slurs, and arpeggios are the essential foundation of technique, but not the whole edifice. Past a point, technical problems are better regarded as problems in musical expression. Conversely, problems in musical expression can be thought of as technical challenges.

As performers, we try to recreate the kind of beauty and meaning we have experienced as *listeners* in the presence of fine playing. If the playing is really good, the musical ideas are clear, and therefore emotionally moving. However, the *craft* that lies behind such expression is never obvious. We have to become very "crafty" ourselves in order to make something happen with similar effect on a listener.

Learning to really *hear* what sounds good — and what doesn't — is the beginning and end of the whole process. Along the way, we come to appreciate the value of clear, vivid sound — always more brilliance, more contrast, more nuance! We learn the means, and the profound effect, of rhythmic give-and-take: the organic pulse of the music, instead of metronomic regularity. Unlearning a too-well-learned basic technique may be required. Sometimes, discovering (or rediscovering) an innate reflex is the key to better playing; more often, though, it is replacement of a natural but awkward reflex with a purposeful, musicianly reflex that in time becomes "natural," and the basis of true relaxation.

All of this goes beyond basic technique and practice for literal accuracy. For the player who has achieved a good degree of technical competence, the following exercises will help lead the way to a higher plateau of musical expression. They should be regarded as *demonstration* exercises for specific points of technical or interpretive control. The student should seek further applications of them in his or her own repertoire. Remember that for the serious musician, practice of the most minute details of technique and interpretation is time well-spent!

THE LEFT HAND

1. Economy of finger-movement: pivot and guide-fingers.

Systematic use of pivot and guide fingers is a cornerstone of good left-hand technique. Various exercises in this book have made use of them. Possibilities for their use should be sought in *all* playing situations, so that the hand comes to expect them.

The purpose served by pivot and guide fingers is stability and accuracy. The fingering indication for both, in most printed guitar music, is the same (a dash before the finger number). A *pivot* finger remains planted while other fingers move, within the same fingerboard position. A *guide* finger physically connects one position to another by sliding along the string.

The following examples illustrate the use of *pivot* fingers. Keep the thumb fixed; make finger-movement compact, economical.



A good example from the standard literature is the Sor 5th Study:



Guide fingers are used constantly, in all kinds of playing situations, to connect chords or single notes. Here are two examples from the basic repertoire:

Pavana, "Dove Son Quel Fieri Occhi" (Anon. 16th c.).



Francisco Tarrega, "Lagrima"



The following two exercises illustrate a useful fact about guide fingers: a finger may be used as a guide even when it is not required by the music. In both exercises, the first finger *never leaves the string*. The other fingers should stay close to the fingerboard at all times. Play very slowly, keeping fingertips always pointed down at the string.

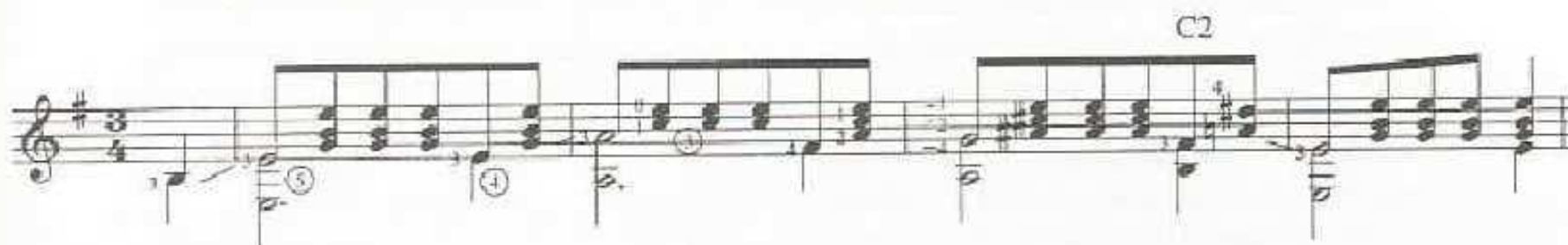
2. Change in angle of placement.

Longitudinal placement of the fingers (as in the above two exercises) defines the basic hand position. However, when the fingers are in a more compacted spacing, outward rotation of the forearm is used to accommodate them. In such cases, the palm of the hand makes an angle with the fingerboard. Be sure that the wrist remains straight — use a rotary movement of the united hand and forearm.



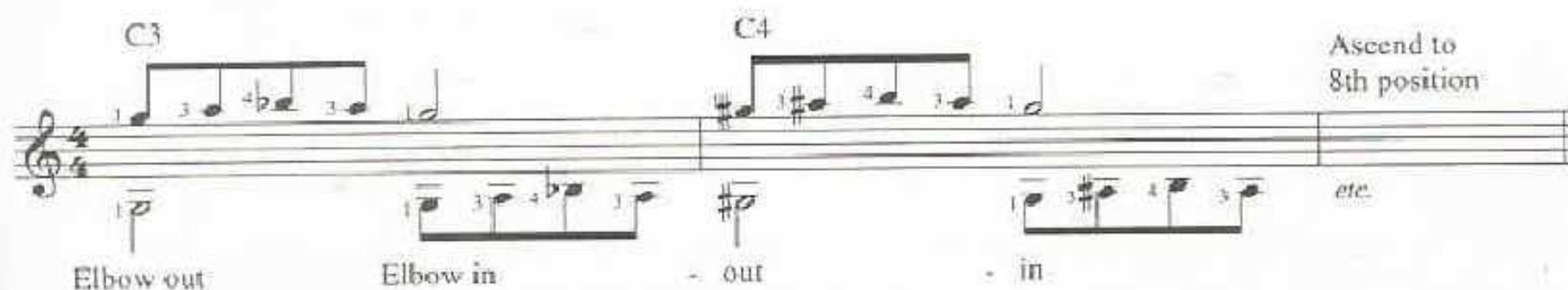
3. Angular control of guide fingers, ascending shift.

Particularly in the case of the weaker fingers, a guide finger sometimes tends to drag, or topple over during an ascending shift. The solution is to turn the finger slightly into the shift so that the pressure is on the inside of the tip. Use this procedure on the following example (compare also with the Villa-Lobos "Prelude 1").



4. Change from bass to treble.

In moving the fingers from bass to treble strings, the upper arm participates. Using the whole arm as an integrated unit, swing the elbow in and out to support the placement of the fingers. When playing the first string, the heel of the hand will be away from the fingerboard; when playing the sixth, it will touch.



5. Change of angle with a position-shift.

Short position-shifts with lateral movement of the fingers also need elbow control for relaxed execution. The following passage from Sor's "9th Study" is a very good example. Note also the alternation between half and full bars, to facilitate clean, natural finger placement.



THE RIGHT HAND

1. Simultaneous preparation of ascending fingers.

In slow practice, the right hand prepares, or "plants" for all ascending figures as if for a chord (see p. 42). At rapid tempo, the preparation need not be strict; it will be enough if the fingers feel as if they are chained together. The application of this principle to some familiar examples from the repertoire is shown by brackets:

Isaac Albeniz, "Leyenda"



Dionisio Aguado, Etude 1 (p.54 above)



J.S. Bach, Prelude for Lute



Fernando Sor, Study 19



2. Damping basses.

The resonance of the bass strings makes it sometimes necessary to silence a lower note by a separate movement of the thumb, in the interest of clean harmony or counterpoint. The reflexes cultivated in "planting" facilitate this movement of the thumb. In the examples below, damp the lower string as indicated by the x's. Be alert for comparable places in your repertoire! Neat bass-lines are one of the distinguishing marks of refined playing.

Luis Milan, Pavan



Bach, Bourrée



4. Arpeggio pieces and fragments as block chords.

Arpeggios may be practiced as technical-harmonic groupings by reducing them to block chords. This will clarify right hand preparation patterns, focus attention more simply on the left hand, and facilitate memorization. In the examples below, the two measures of the actual piece are followed by the appropriate chordal practice form.

Carcassi, Etude 3

[illegible]

Bach, Prelude for Lute

The second staff continues the musical exercise. It begins with a half rest, followed by eighth and sixteenth notes with fingerings (1, 2, 3, 4, 5) and articulation marks (accents and staccato). The notation includes various rhythmic patterns and fingerings throughout the staff.

Sor. Study No. 17

A musical score for the song 'The Rose Tree'. It features a treble clef, a key signature of one sharp (F#), and a common time signature (C). The melody is written on a single staff. The first line contains the first two measures, followed by a double bar line. The second line contains the next four measures, ending with a double bar line. The third line contains the final four measures, also ending with a double bar line. The melody is a simple, folk-like tune. The lyrics 'The Rose Tree' are written below the first measure, and 'The Rose Tree' is written below the final measure.

5. Rest-stroke melody in an arpeggio.

Arpeggio pieces or figures often have a clear melody carried by the highest voice. In such cases, the melody notes generally should be played rest-stroke. See the arpeggio exercises, p. 50 above; some familiar repertoire examples are given below (> indicates rest-stroke):

"Romanza"



Sor, Study 17



Carcassi, Study 3



6. Free-stroke for contrapuntal textures.

Generally, contrapuntal textures are played free-stroke — not with a rest-stroke melody. All of the treble notes in the following should be played free-stroke.

Bach, Bourrée in E_m

Sor, Study 20



Robert de Visée, Gavotte in D_m



7. Use of rest-stroke as accent.

Rest-strokes are used for accent, to add color and contrast in an otherwise generally free-stroke melodic line; often they are used together with slurs. In the following, the treble notes marked with an accent should be played with a rest-stroke; the others are free-stroke.

Luis de Narvaez, Guardame las vacas



Mauro Giuliani, Sonatine, op.71



Sor, Minuet in C



Bach, Prelude in D



8. Accented free-stroke.

There are degrees of accent in free-stroke, depending on angle of attack and the amount of downward thrust. Pushing into the string with a really firm finger, and a "slice" to the left, can produce a free-stroke that sounds almost like rest-stroke. Play the following scale (1) with rest-stroke (2) with accented free-stroke, trying to achieve similar tone-quality.



Accented free-stroke is often preferable to rest-stroke for melodic emphasis, in the interest of lighter tone color or economy of movement. In the examples below, $\sim$ indicates accented free-stroke, $>$ indicates rest-stroke.

Sor, Study No. 5



Sor, Study No. 6



9. Accenting fingers in a chord.

Sometimes an inner voice of a chord has melodic interest, and for this reason, you should be able to accent fingers at will. Also, the ability to do so makes for a more balanced touch. In the following example, try to make the notes indicated by half notes stand out. Do not arpeggiate; simply put more force into the finger used — make the finger "harder".



10. Rest-stroke thumb: Principles.

Learning to use the rest-stroke thumb creatively is part of a serious student's development. Colorless bass lines come alive when rest-stroke is employed for accent. In arpeggios, the use of the stroke economizes movement. The stability gained from having the thumb anchor the hand is also a positive benefit, time and time again.

In the following two exercises, plant *a*, *m*, and *i* on the treble strings. With the hand thus fixed, play as indicated (>) with the rest-stroke thumb. Make sure you have good preparatory nail contact each time, with the tip joint turned back. Aim the stroke straight at the floor, or if you prefer, the bottom corner of the bridge — in either case, the thumb movement should be an economical, natural closing toward the first finger.



Play rest-stroke (>) and free-stroke (v) as shown; a comparable usage is often found in arpeggio and tremolo pieces.



Play the bass notes rest-stroke; leave the thumb resting to support the movement of the fingers.



11. Rest-stroke thumb: Applications.

The following examples illustrate some of the many possibilities of rest-stroke thumb usage. Note the frequent mixture of free- and rest-strokes for technical finesse or musical effect. Note also the use of rest-stroke thumb in chords — a further refinement of the touch.

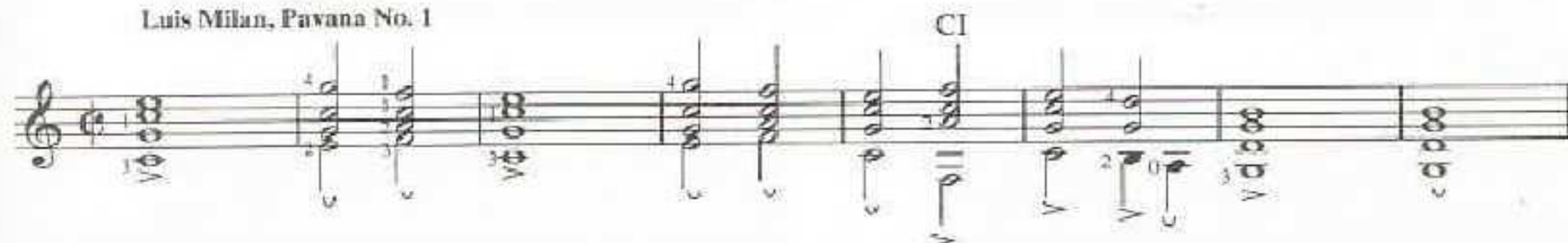
Aguado, Étude 2 (see p.55)



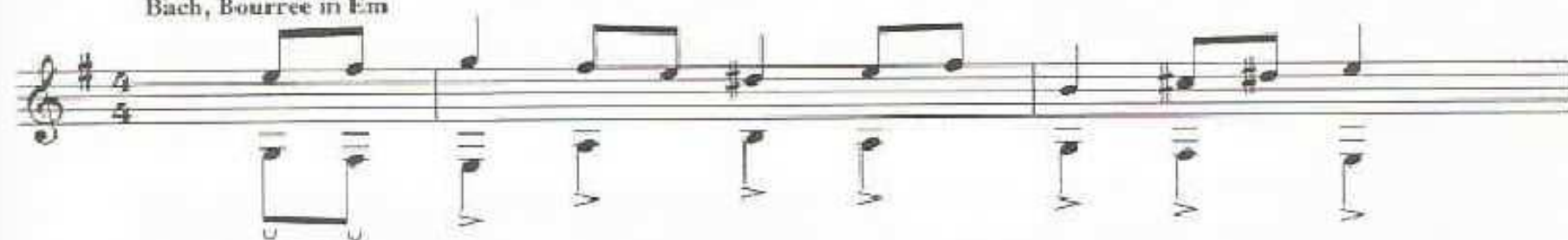
Tarrega, "Recuerdos de la Alhambra"



Luis Milan, Pavana No. 1



Bach, Bourrée in E $\flat$



Albeniz, "Malagueña"



INTERPRETIVE CONTROL

Good phrasing is based on a "feel" for which notes should be connected, and which detached; where acceleration is called for, and where retarding the beat is appropriate; when notes should be louder, and when softer. The natural expressive tendencies of the voice are the goal. However, to achieve a comparably sensitive control of the hands requires patience and focused effort. Usually, there are counterproductive reflexes that must be overcome. These include rushing slurs; over-accenting downbeats; under-accenting upbeats; wooden emphasis of metric pulse-points; and rushing the overall rhythm.

Such things are all quite natural. Just the intent to play musically is not enough. Nor is the effort to achieve reflex smoothness (for example, by playing with a metronome). What is required is an *extension* of the musical perceptions through exact, sensitive control of *timing and force*. This will weed out the unmusical reflexes, cultivate the mind and the fingers so that real musical impulses may be expressed accurately.

All musical interpretation consists of distortion of the literal, within unwritten but deeply rooted rules of taste. Ideas of what to do can be stated as generalities, but they really grow out of the player's command of precise rhythmic and dynamic control. The more detailed the player's repertoire of such mechanisms, the more freedom to play creatively.

The underlying principle of the exercises following may be termed the reverse pendulum swing. They may seem strange to the player first attempting them but there is a reason for this). When "natural" reflex produces an unmusical distortion, the pendulum is off-center, although the player doesn't realize it. To bring the pendulum to a true center, it must first be swung in the *opposite* direction from automatic reflex. This will override the unconscious playing mechanisms. Learned skills are then absorbed, as the pendulum, by the phenomenon of regression toward the mean, gradually returns to a true center of accurate reflex. At that point, the player will be in real musicianly control, able to swing the pendulum either way at will.

It should be kept in mind that these are *practice* techniques! The goal, in *performance*, is to play with legato fluency, rhythmic surge, and dynamic contrast — in other words, with the kind of creative freedom that is the reward of a high level of control.

1. Play ahead of the beat, allowing notes to "breathe."

The playing impulse generally must come slightly ahead of the beat if the note is to be rhythmically "centered." Learning to play ahead of the beat helps in producing a controlled *accelerando*; accented notes also are very effective if played a little early, and then sustained past their literal value.

Play the following C scale as indicated, listening for the beat to come after the actual plucking of the note. Think of this as allowing the note to "breathe."



Do the same for the following chords — listen for a *cresting* of the sound after the plucking action. Associate this mentally with the feeling of relaxation — you've released the arrow; watch it fly to the target. Distinguish between this type of touch and the more percussive, less spacious sound of a chord *heard* as simultaneous with the playing action.



2. Stop sound with a quick right-hand preparation.

The reverse of the first technique is the abrupt cutoff of sound by *pouncing* on the strings with the right hand. This creates an intentional, musical staccato effect, useful in so very many playing contexts. Guitar music, with the exception of modern compositions written after 1950, generally does not indicate articulation. It is up to the player, therefore, to use a variety of articulations imaginatively. Staccato makes the music dance, and in baroque music especially, is an indispensable aspect of correct style.

Practicing the abrupt cutoff of sound trains the mind and fingers to make very precise rhythmic discriminations. The same technique also can be used to retard the beat by micro-restraint of the pulse, and to create anticipation for an accented note.

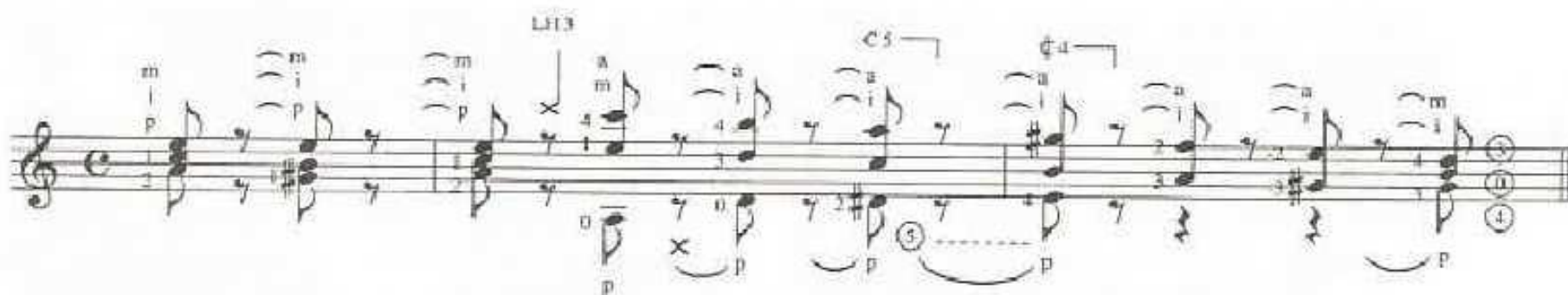
Play the following scale as indicated, shortening the notes by quickly preparing the next finger. **IMPORTANT:** The cutoff brings the finger into a completely prepared position with the nail engaged.

Eighth-note staccato (quick preparation)

Sixteenth-note staccato (super-abrupt preparation)



The Sor "9th Study" is unusual in guitar literature in having been written quite clearly as a chordal staccato study. Therefore, it makes the ideal practice example and should be learned by all serious students. **IMPORTANT:** The cutoff and the preparation for the next chord are the same action; indeed the main point of staccato is to create anticipation for the next chord or note. Therefore, the cutoff should be felt, and heard, as a preparation — not just the end of something. In those cases where the preparing fingers cannot silence the preceding notes, a free left-hand finger can be used. Also, when bass notes move from a lower to a higher string, the back of the thumb can "kill" the lower string as part of its preparation for the next note.



3. Combine staccato with rhythmic accent for interpretive effect.

The foregoing two techniques are used in conjunction to produce variety of accent and rhythmic nuance. Doing so will also help to clarify texture, creating better voice-leading within the respective melodic planes of a piece.

In slow practice, exaggerate the contrast: short, sharp staccato; accented notes rhythmically "centered," and allowed to "breathe." At performance tempo, through the phenomenon of regression toward a mean, the differences in articulation will flatten out. **IMPORTANT:** Do not play accented notes too forcefully! In fact, underplay them — their rhythmic effect will be sufficient accent. Playing them too loud is unmusical, making for a choppy, melodically ragged sound. An overall sense of connectedness — the long line — is the objective.

In the following examples, staccato and rhythmic accent are indicated by dots and dashes. Play unmarked notes with a more neutral inflection, neither staccato nor particularly accented.

Bach, Bourrée in E $\flat$

Allemande in E $\flat$



Luis Milan, Pavana



John Dowland, Mistress Winter's Jump



Matteo Carcassi, Study No. 16

Sor, Study No. 8



4. Use micro-pauses at points of difficulty or to restrain the pulse.

The same kinds of control employed above can be used in very specific ways to smooth over technical rough spots or to keep a runaway rhythm under control. Often these things come together — an increase in the level of neuromuscular challenge usually results in an unintentional acceleration. Holding back is thus the key to the solution, both technically and musically.

Try the following examples, and be alert for comparable possibilities anywhere. Be sure that the restraint of pulse is with the right hand fully prepared, nail(s) engaged — a kind of "gulp" before playing. Don't worry about losing the beat; done correctly in slow practice, the beat will indeed be lost! As you approach performance speed, the pause will shorten to imperceptibility, leaving only a feel (and sound) of relaxed playing.

Albeniz, Granada

Handwritten musical notation for Albeniz's "Granada" in G major, 3/8 time. The notation shows a sequence of chords and arpeggios. Fingerings are indicated by numbers 1-5. A circled 4 is under a chord. A bracket labeled "C7" spans the first two measures. A bracket labeled "pause - prepare" spans the third and fourth measures, with an upward arrow pointing to the start of the final measure.

Bach, Allegro in D

Handwritten musical notation for Bach's "Allegro in D" in D major, 3/8 time. The notation shows a sequence of chords and arpeggios. Fingerings are indicated by numbers 1-5. A circled 5 and 4 are under a chord. A bracket labeled "C6" spans the last two measures. A bracket labeled "pause - prepare" spans the third and fourth measures, with an upward arrow pointing to the start of the final measure.

Tarrega, Maria (ending)

Handwritten musical notation for Tarrega's "Maria (ending)" in D major, 2/4 time. The notation shows a sequence of chords and arpeggios. Fingerings are indicated by numbers 1-5. A circled 6 is under a chord. A bracket labeled "pizz." is under the first measure. A bracket labeled "pause - prepare" spans the third and fourth measures, with an upward arrow pointing to the start of the final measure.

Sor, Mozart Variations (Var. 1)

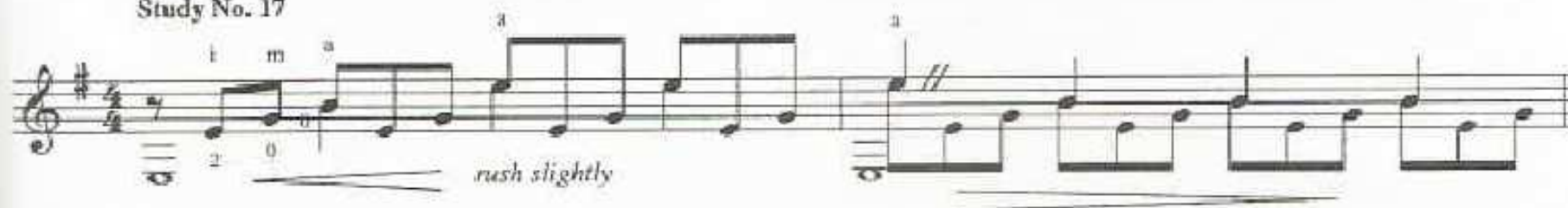
Handwritten musical notation for Sor's "Mozart Variations (Var. 1)" in D major, 2/4 time. The notation shows a sequence of chords and arpeggios. Fingerings are indicated by numbers 1-5. A bracket labeled "C2" spans the last two measures. A bracket labeled "pause - prepare" spans the third and fourth measures, with an upward arrow pointing to the start of the final measure.

5. Restrain attack and pause after notes of emphasis or resolution.

The above techniques can also be used to improve phrasing. Reflex playing tends to produce over-emphasis at points of metric accent or at cadences. It also tends toward excessively literal, rather wooden playing in general. To achieve more musicianly phrasing, practice holding back rhythmically and dynamically — that is, restraining the attack and stretching the beat. This will strengthen over-the-barline connections, achieve a more vocal quality, and allow the rhythm to flex.

In the examples below (all by Fernando Sor), the symbol // means to restrain the attack on the *preceding* note and hold longer than its literal value. IMPORTANT: Do not pause at the bar-line! In all cases, the holding back comes after the downbeat and is ideally accompanied by some acceleration (either before, or after, or both), thus keeping the rhythm on a common center while allowing it to have a playful give-and-take.

Study No. 17



Study No. 5



Study No. 2, end



Variations on "La Folia"

hold!

a tempo

6. Emphasize upbeats to achieve legato connections — the long line of the phrase.

Upbeats tend to be swallowed by normal downbeat emphasis, making for a ragged, angular dynamic contour. A more vocal quality and better voice-leading are achieved by emphasizing upbeats in slow practice; in performance, the emphasis is lessened by intuitive accommodations of the hand and ear, leaving a residue of equal emphasis.

Sor, Study No. 6

Sor, Allegretto Moderato

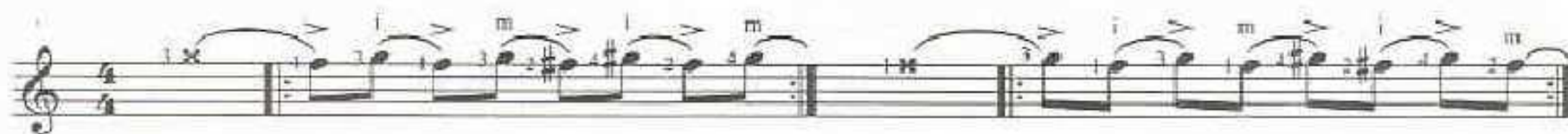


Bach, Gigue in E-flat



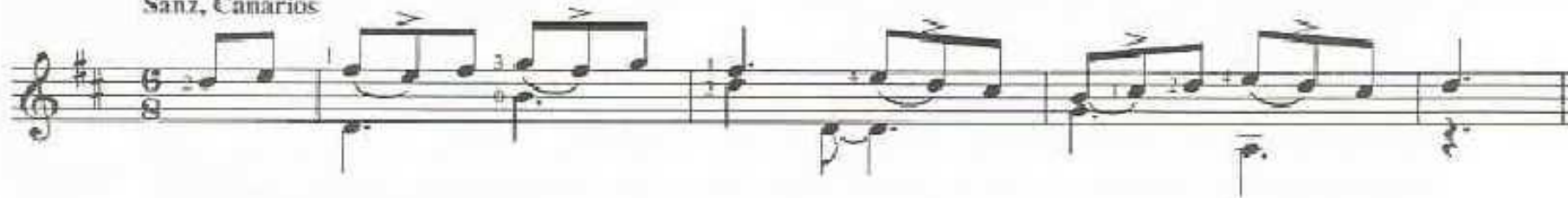
7. Practice accenting slurred notes for stronger melodic connections.

A special form of upbeat emphasis grows out of the use of slurs. Generally, the slurred note (or notes) falls on a weak part of the beat, or an upbeat (see the last group of notes in the preceding Bach example, for instance). Accenting these notes in slow practice improves the technical crispness of the slurs, making them sound almost the same as plucked notes. It also enables the player to "think" the phrasing from the left hand movement — in the case of slurs, a logical procedure. Try the following exercise; notice that the slurring finger actually "plucks" the downbeat. Play i-m very softly; accent the slurs forcefully.



Use a comparable technique of emphasis in the following examples, and look for others in your repertoire.

Sanz, Canarios



Sor, Minuet in C



Sor, Grand Solo



Tarrega, Capricho Arabe

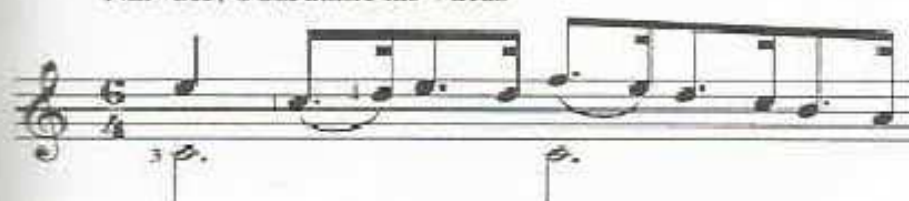


8. Practice equal subdivisions of the beat in dotted and/or staggered rhythms.

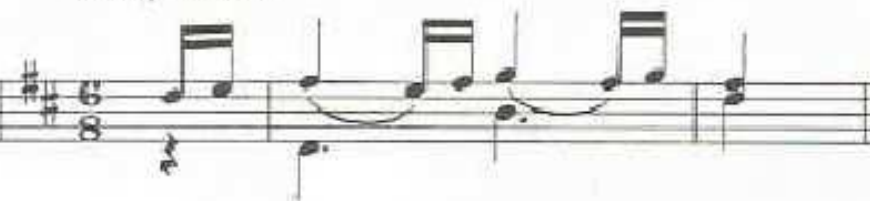
An invaluable practice technique that brings together many of the above strategies is the use of dotted or staggered rhythms. Pianists regularly employ this technique and so should serious classical guitarists. It forces more legato connections, improves rhythmic drive and control, and in the later stages of learning a difficult piece, helps increase speed.

IMPORTANT: Dotting or staggering should not merely achieve a kind of bouncy, jog-trot "swing." (The main idea always is to create a stronger upbeat connection to the following downbeat.) Try to phrase so that you *fall* onto the main note from the preceding short note(s). Look for opportunities to use this technique; any piece based on regular rhythmic figures will profit from being thus practiced.

Narvaez, Guardame las Vacas



Sanz, Canarios



Bach, Allemande in E



Scarlatti, Sonata in A



Giuliani, Sonata, op. 15



Tarrega, Estudio Brillante



*Also available from Summy-Birchard
by CHARLES DUNCAN*

The Art Of Classical Guitar Playing

Companion to Classical Guitar 2000

*A uniquely detailed and informative guide to technical
and musical mastery of the Classical guitar.*

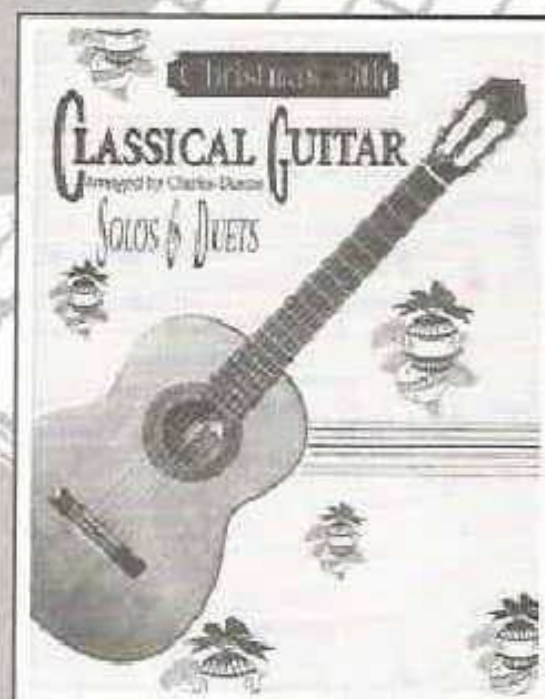
- *Used as a standard text in college guitar programs
throughout the U.S. and abroad*
 - *Numerous music examples*
 - *Dozens of photographs and illustrations*
- 140 pages, 079/\$19.95*



Christmas With Classical Guitar

*A generous selection of favorite carols
arranged as solos and duets*

- *14 solos and 17 duets*
 - *Intermediate-level, harmonically-rich
but playable arrangements*
 - *Duets suitable for guitar, another instrument or voice
(words included)*
- 48 pages, 408/\$7.95*



Order through your local dealer from:

SUMMY-BIRCHARD INC.
C/O WARNER BROS. PUBLICATIONS, INC.
265 Secaucus Road
Secaucus, NJ 07096
A Time Warner Company

SUMMY-BIRCHARD INC.